by Joseph Marcel R. Williams
Department of Urban Studies and Planning,
Massachusetts Institute of Technology

#### **Abstract**

Large urban megaprojects costing billions of US dollars, erected with the promise of great economic benefits but controversial due to their environmental and social impacts, are becoming more common throughout the world. Most popular in the Middle East and in Asia, such projects exemplify how forces of globalization engage with urban form. Urban megaprojects are increasingly pursued by foreign developers looking to expand abroad, but often face challenges operating in unfamiliar political and regulatory settings.

Chinese developers, in particular, have global ambitions, but may come into conflict with local priorities as they extend their reach overseas. Forest City is a vast luxury real estate development by Chinese developer Country Garden, on 14 square kilometers of reclaimed land spread over four islands on the Malaysian side of the Straits of Johor: the strip of water that separates Malaysia from Singapore. This study uses Forest City as a case study to investigate the key themes associated with large urban mega projects and the impacts they have on a region. Among them is the notion that such projects are considered "exceptional," and therefore can bypass traditional planning and development controls. Actors external to planning and development are suspected of co-opting the process for their own interests. Evidence collected during fieldwork from July-August 2015 and January 2016 suggests that Forest City fits neatly within these patterns, and sheds light on the patterns of influence in urban development throughout the region. The case also suggests several lessons for Chinese developers operating abroad.

## Introduction

A growing number of large urban megaprojects undertaken in various parts of the world by foreign investors have faced serious

challenges because the developers involved are unfamiliar with the political and regulatory settings within which they are operating. As Chinese developers in particular seek opportunities abroad, the potential for conflict and contestation between local priorities and developers with international ambitions will probably grow. The case of Forest City in Johor, Malaysia, illustrates many of these challenges. Dramatic shifts in the design of the Forest City project occurred after the developer, Country Garden Holdings Ltd., had begun construction, reflecting the costs involved in accommodating regulators and responding to harsh reactions from local, regional, national, and even international actors.

The objective of this thesis is to use the case of Forest City to explore the government-developer-community interactions surrounding megaproject development by an international investor operating outside their home country. This study examines how inter-scalar forces shape the development process in ways that are not initially obvious to developers operating on foreign soil.

#### Statement of need

There has been relatively little research on the development of megaprojects in Southeast Asia, especially efforts headed by foreign developers. Yet, we can expect many more such projects in the years ahead. This case study of Forest City seeks to address both these voids, and offers a fresh perspective on the growing theme of Chinese development abroad. The Forest City project is an especially compelling case because it lies in a trans-boundary setting in the so-called "growth triangle" of Malaysia, Singapore, and Indonesia. Many more local-global interactions in urban development are sure to follow. According to Altshuler and Luberoff, "efforts to realize large-scale investment projects often provide an unusually revealing window on patterns of influence in urban development politics." For Southeast Asia and beyond, Forest City provides just such a window.



Figure 1. Context map for Forest City. Google basemap

## Synopsis of Forest City

For much of its history, Johor Bahru, Malaysia has been a scrappy border town across the narrow Straits of Johor from booming Singapore. Located in Malaysia's southernmost state, Johor, the area shares much of its history with its dynamic southern neighbor. Over time, though, stark economic disparities have emerged between the two locations, including levels of real estate investment. In the past few years, however, Johor has witnessed a dramatic increase in such investment, including a number of ambitious real estate projects by Chinese developers. The sheer scale of these projects is astounding—with housing planned for hundreds of thousands of people, often involving extensive land reclamation.

Country Garden Holdings Ltd.—a private firm that ranks among China's top ten developers—began work in 2014 on a project that was remarkable even by the standards of other massive projects in Johor. This new project, named Forest City, hopes to comprise some 2,000 hectares. It is being built exclusively on reclaimed land in the Straits of Johor. Recalling recent developments in Dubai, it imagines a luxury community for hundreds of thousands of people. Targeting "international buyers," it would be by far the largest such project in Malaysia.<sup>3</sup> It is reported to be "very high end," with "dazzling water features" and a number of destination attractions. All of this is intended to be within easy access to Singapore via a second link bridge.<sup>4</sup>

For all this grand vision, the project site was not part of a bustling metropolis. Instead, it was a rural area dominated by palm plantations and dotted with small fishing villages. Residents plied their trade along coastal mangroves. Home to the largest seagrass bed in peninsular Malaysia, the area had for some time been considered eligible for special environmental protection. Meanwhile, its proximity to Singapore ensured that any unusual activity would attract scrutiny from across the international border.

In January 2014, coastal residents were surprised to find barges dumping large quantities of sand on their fishing grounds. No one in the community could recall being consulted or hearing about the project;<sup>6</sup> it was not listed in any local, regional, or federal development plan. No environmental impact assessment was prepared prior to initiating construction, despite the sensitivity of the site, the project's immense scale, and Malaysian environmental laws. What emerged was that the Sultan of Johor, the state monarch and an active businessman, had received a 34 percent stake in the project.<sup>7</sup> There are indications that he and close associates helped shortcut the formal approval and regulatory process. Thus, the Johor Department of Environment allowed the project to move ahead, despite the fact that it was not in compliance with a host of plans and regulations.<sup>8</sup>

Not long after the media caught wind of the project, Singapore made official inquiries, seeking more information on what was intended. Officials there were concerned about possible adverse effects on the hydrology of the Straits, as well as numerous potential environmental impacts. Singapore joined a chorus of inquiries and critical reactions by Johor fishermen, opposition politicians, environmentalists, and other property developers. Many expressed a concern about oversupply of newly constructed residential and commercial space in the Johor property market. But by this point, enough sand had been deposited to smother much of the seagrass bed. Several months after Country Garden began reclamation, the Malaysian federal DOE issued a stop-work order, mandating that Country Garden complete a full detailed environmental impact assessment (EIA) before any further work could proceed on the project.

This intensive environmental review resulted in significant changes to the project. It was scaled down by approximately 30 percent and its landform split into four islands that surrounded, rather than smothered, the seagrass. <sup>10</sup> A number of "mitigating" measures were required, along with compensation to local fishermen. The cessation of work gave critics time to ask more questions of Country Garden and its Malaysian partners. A public information session in the village of Kampong Pok turned into a public relations disaster for the developer, when the developer's spokesperson announced that there was widespread community support for the project, and then was attacked by irate villagers. A number of

negotiations with important stakeholders followed, resulting in further modifications to the project.

Around a year after work began, ironically, the Forest City megaproject was formally approved by the federal Department of Education (DOE) in Putrajaya. While the halt in construction led to significant changes, the basic idea of the project emerged intact. At great cost, however, the developer was forced to assume greater social responsibility.

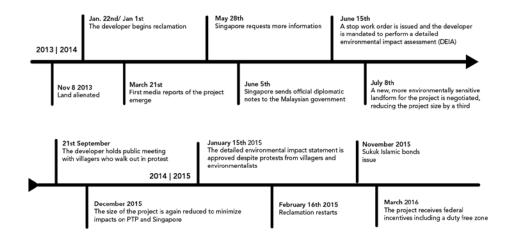


Figure 2. Timeline of Forest City case

#### Role of the Sultan

The Sultan of Johor is one of Malaysia's nine traditional monarchs, each of whom acts as a steward of Islam for their respective states. As constitutional monarchs, the Sultans do not participate directly in governance, but do have some limited discretionary power. While they are figureheads, in practice they exert considerable influence and are often involved in the political and economic affairs of their states. The Sultan of Johor, in particular, was an active businessman, who had found ways to include himself into a number of deals worth billions of dollars.<sup>11</sup>

Following the early success of a project in Danga Bay, <sup>12</sup> Country Garden committed to a second large real estate development in Johor. According to media reports, Sultan of Johor Ibrahim Ismail invited them to embark on the project. Under the Iskandar masterplan prepared by the Iskandar Regional Development Authority (IRDA), the southeastern side of the state had become the focus of new development and investment. <sup>13</sup> Desiring more evenly balanced development, the Sultan convinced investors to develop a marine site on the neglected southwestern side. A project director later praised the Sultan as "very visionary…he is the one

who urged investors to come in."<sup>14</sup> A professor of hydrology at UTM (Universiti Teknologi Malaysia), Dr. Maketab Mohamad, described the Sultan as "the key player that made this project happen."<sup>15</sup> He said that there was an unwritten rule that all major decisions require the tacit approval of the Sultan—part of an invisible yet inexorable power structure. The Sultan took a sizable personal stake in the US \$121 billion project<sup>16</sup> through a combination of direct ownership and holdings by a close associate. He presumably tried to shortcut the early approvals process in order to move the project forward. Country Garden's regional president for Malaysia, Kayson Yuen, has stated that the company studied the project for more than a year before they decided to invest.<sup>17</sup> If true, this would place conception at some point in 2012.



Figure 3. Sultan of Johor (official royal portrait)

## Rationale for siting Forest City in Johor

The southern state of Johor, with its proximity to Singapore, was seen as the ideal site for Country Garden's first large-scale Malaysian venture. While Singapore is an island, it is far from isolated. Economic and labor linkages between Johor and Singapore bring more than 200,000 people across the causeway every day. Workers live in Johor (where housing prices are much lower) and commute to work in Singapore. Dramatically lower costs in Johor justify for many what can be a two-hour crossing due to immigration and security checks. Through its economic dynamism, Singapore has created increasing demand for housing near its borders. In many ways its "hinterland" is Malaysia, where many industries have moved and supplies are sourced. A growing number of

Singaporean firms, moreover, have moved their back offices to Johor in an effort to cut costs. Interest in developing more housing in Johor is further strengthened by skyrocketing real estate prices in Singapore.

Country Garden's interest in Johor is motivated by an effort to seek returns overseas amid a slowing domestic property market in China, and higher barriers to investing elsewhere. Lower prices and fewer market restrictions than in places like Hong Kong have made the region attractive. While Singapore itself has strong appeal, it is an expensive, mature market, with relatively fewer compelling development opportunities. <sup>19</sup> Compared to other Asian nations, moreover, Malaysia has been politically stable and has maintained relatively good relations with China. In light of disputes over islands in the South China Sea, Chinese investments in Vietnam and the Philippines carried political risks. <sup>20</sup> Other potential sites for investment, such as Thailand, restrict foreign ownership of property. Cultural similarities and the large number of Chinese-speaking Malaysians no doubt further enhance Johor's appeal. <sup>21</sup>

A large and established following in China gave Country Garden confidence that it could generate demand in China for new Malaysian homes. Country Garden Holdings sales and marketing general manager Nicholas Hum epitomizes this optimism, claiming that "we have one million owners in China, and it's like a fan club. Wherever we go, there are just buyers that buy without any questions." Forest City's planned educational partnerships, including agreements with international boarding schools, were seen as a powerful enticement: "A lot of them are concerned about their kids. They plan quite far ahead," said Hum.

Country Garden expectations were likely buoyed by the initial success of its first Malaysian venture at Danga Bay, also along the Straits of Johor. The company released some 9,000 units simultaneously, and some 6,000 of them were reportedly taken up in a short period—as little as a day after hitting the market.<sup>23</sup> Still more remarkable, those sales preceded completion of the units by several years.

Danga Bay encountered relatively little opposition from environmentalists. This reflected the fact that although the project involved some land reclamation, most of it was built on existing land.

#### Criticism and broader context

Some commentators have questioned the need for land reclamation, when Johor clearly has no shortage of open development sites. An executive at a rival Chinese firm, Dr. Jeffrey Yee, explains that in order to attract high-value international buyers, developments need to be by the sea. "You can't just put up a cluster of towers in the middle of JB [Johor Bahru] and expect to attract that much attention,"<sup>24</sup> he noted.

Presumably, reclaiming new land allows the developer to maximize the number of units near the water and increase overall development value.

Country Garden sees similarities between Johor and Shenzhen in China, where it has undertaken several large developments. <sup>25</sup> Both areas are positioned next to much wealthier, more developed neighbors that are global hubs of trade and finance. By leveraging close linkages with Hong Kong, Shenzhen emerged as a manufacturing powerhouse and a destination in its own right. While the analogy is imperfect—Singapore and Malaysia are separate countries, whereas Hong Kong is a special region of China—Country Garden was optimistic that Johor could benefit from its ties to Singapore in the same way that Shenzhen benefitted from its ties to Hong Kong. Increasing costs in Singapore had already begun to persuade factories and offices to relocate in cheaper areas across the border, as had occurred in Hong Kong. Well before the inception of Forest City, other large development projects, "mushrooming along Malaysia's shoreline facing Singapore," <sup>26</sup> had invited the comparison.

## Accounting of stakeholders

Fishermen living in small villages, or in Malay, were among those most directly affected by the project. Kampong Pok and Kampong Pendas are two such villages that are close to Forest City and are dependent on the sea. Fishermen living there were the first to become aware of the project, and also among the first to express their opposition. They feared for their livelihoods, as extensive land reclamation threatened to reduce and pollute their fishing grounds. Country Garden was eventually compelled to establish a compensation fund disbursing RM 104 million for the fishermen, administered through the Johor Fisherman's association.<sup>27</sup> At the same time, however, the developer argued that the area's fishermen had no future at sea, and encouraged them to seek more "modern employment."<sup>28</sup>

Opposition politicians, particularly those in districts near Forest City, emerged as outspoken opponents of the project. Individuals such as Cheo Yee How, an environment spokesman for DAP (Democratic Action Party), drew attention to the risks to the seagrass and mangroves. <sup>29</sup> Other DAP members, such as Boo Cheng Hau and Lim Kit Siang, also criticized the project and posed many questions to the developer. <sup>30</sup> Boo Cheng Hau asked how the project began without an EIA, and argued that the community had the right to know whether large-scale land reclamation would cause adverse environmental impacts. <sup>31</sup> In a published review of the project, he claimed that project benefits would be distributed unequally, and expressed his concern for the indigenous Orang Seletar community. <sup>32</sup> Lim Kit Siang, meanwhile, sought to determine the project's impacts on fishermen. <sup>33</sup>

Within the Singaporean government, the Department of Environment and the Foreign Ministry were the most closely involved in monitoring the project, but other agencies and boards were also involved.<sup>34</sup> A few months after reclamation commenced, the Foreign Ministry sent two diplomatic notes requesting more information and asking for an EIA.<sup>35</sup> A previous dispute over land reclamation in 2003 no doubt influenced Singapore's behavior.<sup>36</sup> The Environment Ministry was principally concerned about possible impacts on the hydrology of the Straits.<sup>37</sup> Singapore emphasized the need for Malaysia to comply with international law. At one point, both prime ministers were engaged in discussion of the project.<sup>38</sup>

Country Garden, and more particularly its Malaysian subsidiary CGPV, was Forest City's developer. Successful development of large townships in Southern China propelled Country Garden to the top ranks of Chinese developers.<sup>39</sup> The Danga Bay project was their first foreign venture and Forest City would be their flagship project.<sup>40</sup> CGPV was created as a joint venture between Country Garden Holdings Ltd, the Chinese developer, and Esplanade Danga 88, described as a representing the Johor state investment arm, but in reality a holding company for the share of the project held by the Sultan.<sup>41</sup> It is headed by Datuk Othman Yusof, who would frequently act as its spokesman and headquartered at Danga Bay.<sup>42</sup>

A number of environmentalists and environmental NGOs protested against the project.<sup>43</sup> They were concerned that a priceless natural heritage—in the form of mangroves and Malaysia's largest seagrass bed—was under direct threat from the development. They drew attention to the lack of a required EIA, and to the failure to consult with either environmentalists or villagers during the design process.<sup>44</sup>

## Research resources and methodology

A central component of the research for this thesis involved conducting eighteen open-ended interviews with a range of stakeholders involved in the Forest City project. These included fishermen from villages near the reclamation site, planning staff at IRDA, representatives from Country Garden, Johor environmentalists, marine researchers, rival developers, and Johor politicians. An open-ended, unstructured format facilitated conversations with each interviewee, highlighting their concerns and determining their knowledge of what had happened.

Most interviews took place during fieldwork in Johor and Singapore between early July and late August 2015. Interview durations ranged from about fifteen minutes to more than two hours. Virtually all conversations were conducted on-site in locations convenient to the subjects. In a handful of cases involving fishermen in the village of Kampong Pendas,

Dr. Serina Rahman served as a translator. Interviews were recorded if the subjects gave verbal consent. In two cases, subjects were unable to be interviewed in person and instead answered questions by email.

A subsequent set of interviews was conducted during a return visit in January 2016. During this time the author attended a global press conference in Singapore, during which Country Garden officially launched the project. Another researcher fluent in Mandarin, MIT Urban Planning student Libbie Cohen, traveled to Shanghai and Singapore during fall 2015 to conduct two additional interviews, both with Sasaki Principal Michael Grove. A table of everyone interviewed is included in appendix A.

Requests to speak with the Sultan of Johor or a member of his office were not answered. Efforts were also made to interview officials in the Singaporean government, particularly its foreign ministry and department of environment. These conversations were perfunctory and yielded no new information. Similarly, requests to interview members of the Johor department of the environment, the Johor State Economic Planning committee, and members of the local council directly involved in approving the Forest City project either went unanswered or were turned down. The absence of interview information from any of those government agencies in Johor and Singapore, as well as from the Sultan of Johor, leaves gaps in this study. However, a review of articles, transcripts, and newspaper accounts has been used to fill many of these gaps.

The Detailed Environmental Impact Assessment that was ultimately prepared for Forest City served as a chief source for many of the technical details about the project. It includes plans, environmental studies, descriptions of mitigation measures, and social impact estimates. It also includes summaries of key focus-group discussions and responses to formal questions put by officials that in some cases are the only authoritative indication of Country Garden's viewpoint.

A variety of sources were used to uncover investment and economic figures for Johor and Iskandar Malaysia. A number of planning documents, including those prepared by both state and federal agencies, also proved valuable. These include IRDA's shoreline management plan,<sup>45</sup> the Iskandar Malaysia Comprehensive development plan,<sup>46</sup> and reports by Khazanah Nasional (the Malaysian federal investment fund),<sup>47</sup> among others. Finally, promotional materials provided by Country Garden itself—either online, through brochures available at its sales gallery or materials given to attendees of its global press conference in Singapore—yielded important information about the developer.<sup>48</sup>

More than 150 reports were found through an exhaustive media search encompassing virtually every web-published report about the project from mainstream news outlets in English. Additionally, a smaller number of media reports were gathered from Malay and Chinese (Mandarin) sources that were subsequently translated. Supplementing

these articles were newscasts and videos in multiple languages, including drone footage of the project recorded by activists, some of them posted to YouTube. Articles and media reports originally published in Mandarin were translated by Libbie Cohn. Additionally, a number of Malay language (Bahasa Malayu) articles were machine-translated and subsequently reviewed for correctness by various native Malay speakers.



**Figure 4.** Rendering of Forest City Source: Country Garden promotional brochure distributed at Forest City global press conference in Jan 2016.

# Global megaprojects: characteristics and examples

Summary of key attributes of urban megaprojects:

- Large investment, often in the billions of USD
- Project capital is sourced globally or nationally
- They have strong linkages to global networks
- They have a construction lifespan measured over decades
- Their design, planning and construction often draw on an international workforce of professionals, consultants, and laborers
- They are seen to bypass traditional systems of government
- Demand forecasts, cost estimates, and projected benefits are characterized by high levels of uncertainty

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- Secondary benefits are expected for society at large, and not just the project proponent
- It is argued that they reflect new systems of governance which prioritize elites over locally affected populations
- Regional and local plans often do not direct investment in megaprojects
- Actors outside the planning and development realm often have a strong influence on the projects
- The new paradigm of megaproject development strives to minimize popular resistance and avoid displacement
- Projects pose serious concerns for urban sustainability, whether in the form of sprawl or damage to the natural environment
- They seek to position cities on a global stage to enhance the perceived competitiveness of a region
- Despite their ostensible break with megaprojects of the past, new megaprojects still adopt a top-down planning approach

County Garden's Forest City project meets or surpasses all the commonly accepted attributes of urban megaprojects. It is intended to span more than 14 square kilometers, involve a massive 20-year reclamation effort and investment totaling US \$45 billion. <sup>49</sup> At its peak it will employ more than 5,000 workers, require the construction of new roads, power plants and a vast network of supporting infrastructure. Country Garden suggests they will construct 300,000<sup>50</sup> units of housing, accommodating hundreds of thousands of people and creating tens of thousands of jobs. While the project is headed by a private Chinese developer, the Johor State government is invested in Forest City through a stake held by KPRJ (Kumpulan Prasarana Rakyat Johor), its public investments arm. Thus, the project is something of a public-private partnership. The project has enjoyed significant government support and is now integrated into the formal regional development strategy. <sup>51</sup>

Aside from its large scale, the most distinctive characteristic of Forest City is its reliance on land reclamation. There are few projects that compare with the proposed 14-square-kilometer reclamation, spread over four islands in the Straits of Johor. Land reclamation is expensive, and may be difficult to justify when there is ample existing land available. The most prominent analogues are in the Persian Gulf, including the famous Palm Jebel Ali and its Qatari response, The Pearl in Doha. These iconic projects help forge a national identity while enhancing the prestige of the cities and states in which they are situated. Moreover, they exemplify the international urban enclaves discussed in the globalization literature. Yet these projects also have significant environmental and social impacts. The

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Palm Jebel Ali disrupted local hydrology and threatened marine life. The Pearl, meanwhile, was implicated in a number of human rights abuses involving its migrant workforce. In both cases, these impacts have a bearing on Forest City.

As Country Garden embarks on the Forest City project in Johor, it carries with it many of the lessons it learned from over 20 years of designing, building and managing townships across China. Design attitudes, many of which reflect the "Chinese dream," will inevitably shape the form and execution of Forest City. Yet Country Garden's Malaysian flagship is also something fundamentally different. The company is not simply building tracts of housing or developing a coastal resort; it is attempting create a new city altogether, down to the very land on which it sits. Forest City presents Country Garden with a unique opportunity—and at the same time, a tremendous responsibility.

## Analysis of Forest City

## Non-compliance and co-optation

What emerges from the literature on megaprojects and many practical examples is a broad theme of noncompliance and co-optation. By virtue of their scale and exceptionality, megaprojects often exist outside the realm of established regulations and planning structures. Their proponents, who are frequently powerful actors external to planning and government, effectively co-opt the development system to pursue their narrow interests. For such actors, disregard for local populations often mirrors their disregard for plans and regulations; there is very little, if any, engagement or consultation with local communities. The Forest City case provides a rich illustration of these processes at work.

## Lack of compliance with plans

Based on a review of the relevant academic literature, experience with global urban megaprojects has demonstrated that regional and national planning efforts have minimal influence on the specific path of investment and urban development. Urban megaprojects often lie outside the formal planning system. Their scale, magnitude of investment, or strategic purpose enables them to be considered exceptional. Such projects are generally not included in urban or regional plans, or are only incorporated retroactively. They are implemented with provisional measures that can sidestep statutory or regulatory requirements.<sup>52</sup>

The case of Forest City is remarkably consistent with these patterns. The project was not described in any national or regional plans for Johor. In fact, the development directly contradicted existing planning priorities for the site; it was initially recommended for protection as an

environmentally sensitive area.<sup>53</sup> National regulations, in particular, suggest the scale of reclamation would be illegal without specific approvals, which were generally not granted before reclamation commenced. Even after the project began, it was grossly out of compliance with environmental regulations surrounding an environmental impact assessment. The combination of these factors paints a convincing picture of "exceptionality,"<sup>54</sup> in which plans, regulations, and requirements were openly disregarded.

## Existing plans and regulations

A 2011 IRDA shoreline management plan for Iskandar Malaysia indicates strong environmental priorities that are entirely incompatible with the Forest City development. The area includes the Merambong Island, a small uninhabited stretch of land near the international border, and the seagrass beds of Merambong and Tanjung Adang shoals—in short, nearly the entire area that would be occupied by Forest City. The area was specifically designated for management in order to "protect marine flora and fauna, especially [the] seagrass bed." The only proposed development in this management plan was a small research platform intended to facilitate research on dugongs and monitoring of the seagrass beds.

The location was further classified as an environmentally sensitive area "rank one," which "disallows any development except for low-impact nature tourism, research, and education." An IRDA land use blueprint echoes the environmental importance of the seagrass beds, calling them "core conservation areas" in which "no further development is allowed, except for eco-tourism, research, and education." These appear to have been planning designations, lacking judicial and executive authority, but they nonetheless clearly signal IRDA's intentions for the region.

Furthermore, the plans indicate a formal initiative to establish the site as a "marine protected area." At the time (2011), the site lacked formal environmental protection along the lines of nearby areas, but was noted for its environmental value. The blueprint recognizes the marine diversity of the site, its importance as a feeding ground for various marine species, and its role as a critical landing ground for migratory birds. The port of Tanjung Pelepas is acknowledged as the principal threat in the area. IRDA intended to cooperate with the Johor Port Authority and Marine Department (Jabatan Laut Malaysia)—the agencies with direct jurisdiction over the site—to administratively declare Merambong island and the seagrass beds to be a protected area. It outlined a detailed plan to staff the new site, facilitate research, and establish a low-impact tourist industry involving local residents. 59

The comprehensive plan for the development of Iskandar Malaysia (CDP) includes the land around the future Forest City site as part of its "flagship C," with primarily industrial land uses. Among the list of prescribed economic activities—including manufacturing, logistics, warehousing, and entrepot trade—residential developments are notably absent. On the national physical plan demands that "sensitive coastal ecosystems shall be protected and used in a sustainable manner." Listed among the "areas that are environmentally sensitive" are the seagrass beds near Merambong shoal. They are described as "a nursery and feeding ground, permanent habitat and shelters for fish." The plan specifically underscores their role as feeding areas for dugongs.

The South Johor CDP also places emphasis on protections for existing Ramsar sites of Sungai Pulai and Tanjung Piai, which are within a few kilometers of the Forest City site. The Ramsar convention of 1971, known as the convention on wetlands, establishes a framework for international cooperation on the convention and management of wetlands. Areas designated as Ramsar sites are "wetlands of international importance," critical to conserving biological diversity. Underscoring the importance of this designation, the South Johor CDP identifies a need for "control measures...to protect these special areas...namely those around the Port of Tanjung Pelepas" on other words, the future site of Forest City.

The Malaysian national physical plan (NPP), a federal document, states that any reclamation works larger than 20 hectares must be specifically approved unless already outlined in the plan. Furthermore, NPP generally prohibits coastal reclamation unless for the purposes of security or port development. As the Forest City project was originally estimated at 2,000 hectares on entirely reclaimed land, it clearly violated all these provisions. Another set of environmental laws established requirements for environmental impact assessments (EIAs). The 1987 Malaysian Environmental Quality Order, in combination with the 1974 Environmental Quality Act, mandated a DEIA (detailed EIA) for all coastal reclamation projects greater than 50 ha. Moreover, they require an EIA for the construction of new townships, regardless of size, and for all coastal resort facilities or hotels with more than 80 rooms. Again, the Forest City project fails to comply with all these measures.

#### Initial Actions in Johor

Given that Forest City blatantly contradicted so many plans and regulations at multiple levels, it remains puzzling how the project managed to begin in the first place. Over the course of 2013, Country Garden Holdings Ltd. and a Malaysian corporate entity, Esplanade Danga 88, entered into a joint venture to create Country Garden Pacificview (CGPV),

the entity undertaking the Forest City project. On November 8, 2013, five large parcels of marine area were "alienated" to the company, totaling 4,887 acres, or 1,997.7 hectares. All of the parcels were located in the waters off the Straights of Johor, adjacent the Tuas Second Link crossing to Singapore and the Port of Tanjung Pelepas. The area encompassed the seagrass bed at Merambong shoal, the largest in peninsular Malaysia, as well as a nearby bed at Tanjung Adang.

While the DEIA claims that the "land" lots for the project were contained within mukim Tanjung Kupang, a district of Johor, it is unclear which authorities were required to give their permission for the project. Under Malaysia's national land code, all foreshore and seabed are considered state lands, which in this case would be administered by the Johor government. Indeed, it was the Johor government that initially approved the project. IRDA planning documents, however, suggest that the project site fell under control of the Johor Ports Authority (JPA) and the National Marine Department, which are both federal bodies. The entire Forest City project fell within the border of the Port of Tanjung Pelepas and directly conflicted with approved expansion plans, according to documents provided as part of the DEIA. Yet there is no mention either in the project's DEIA or in media reports of CGPV having received approval from the JPA or national marine department.

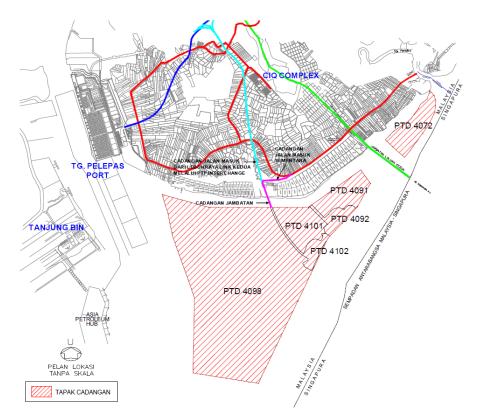


Figure 5. Parcels "alienated" to Forest City<sup>67</sup>

The lack of communication between CGPV and federal agencies is evident in the complete absence of port directives regarding the reclamation. Despite the proximity of the Forest City reclamation works to the Port of Tanjung Pelepas, no port "circulars" were issued for the entirety of 2014. Reclamation elsewhere in Johor, much of it posing much less risk to navigation, was duly announced throughout the year. <sup>68</sup> A circular issued in mid-January 2014, for example, when reclamation was claimed to have begun, referred to reconstruction of a jetty near the port. Despite its clear relevance to marine safety and navigation, no reference to the Forest City project appears until October 2015, when a "working area" was established for "reclamation activities in the Tanjung Pelepas Port limit, Johor."

A dubious chain of events surrounds the project's initial approvals and interaction with the Johor Department of Environment (DOE). On January 13, 2014, CGPV received a letter from the Johor DOE informing them that the first phase of reclamation, encompassing 49.3 hectares, could proceed, since it fell under the 50-hectare threshold established under Malaysian environmental regulations.<sup>70</sup> CGPV then submitted a PAT (Penilaian Awal Tapak), known as a "preliminary site assessment," for its first phase of the project. Considered a "preliminary screening" for new projects that ensures "compatibility...with surrounding land use and land use planning," the PAT is required before a formal EIA report can be submitted. Despite later claims by CGPV that the project—or at least its first phase—did not require an EIA, submitting a PAT suggests that the company did recognize its project was among the list of "prescribed activities" for which an EIA is necessary. As one comparative study on EIA procedures notes, "the reason behind conducting a PAT is to ensure that the proposed site for the EIA project are [sic] being assessed and screened before the submission of the EIA report."71 The contradiction leaves many open questions.

According to reports of other projects in Johor, DOE approval indicates that the project was deemed compatible with the gazetted structure and local plans, land use, buffer zones, and other general requirements. Since a host of evidence suggests quite the opposite, the result is striking. It is difficult to believe that the Johor DOE—an agency tasked with environmental protection—would be ignorant of the presence of seagrass in the proposed reclamation area. This suggests that they either willfully ignored the environmental implications of the proposed reclamation, or were otherwise swayed. It is also difficult to believe that they were unaware of the overall scale of the project and therefore allowed the first stage to proceed without an EIA. Even in the unlikely

scenario that they knew nothing of CGPV's ultimate ambitions, land records would have indicated that the project spanned a vastly greater area than 50 ha.<sup>74</sup> Hana Badriah, a planner at IRDA who previously worked at the Johor DOE, noted from her experience that "the whole plan for a development needed to be submitted before it could begin."<sup>75</sup> A project would be rejected if its proponent presented only a portion or first phase. Badriah remains puzzled how the project gained approval without a DEIA, especially since both the state and federal DOE have power to require an EIA for reclamation independent of the statutory threshold. "It's funny that the state wouldn't ask," she noted.

By its own accounting, CGPV began reclamation work on January 22, 2014. Given the time needed to arrange the ships, earth-moving equipment, and other physical infrastructure necessary for reclamation, CGPV must have been all but certain of the approval and massed its resources in anticipation. Yet accounts from local residents contradict even this compressed timeline. According to Serina Rahman, a resident of the Tanjung Kupang area nearest the Forest City site who runs an environmental NGO, reclamation actually began on January 1, 2014, well before any dates given in the DEIA. She further asserted that the area had been surveyed and marked out even earlier, at the end of 2013, <sup>76</sup> a claim supported by Kartine Majid of Johor developer UEM Sunrise. <sup>77</sup> No locals had been consulted or even informed about the project prior to the start of reclamation. <sup>78</sup>

CGPV began work by constructing a causeway from the mainland to main body of their nascent island. Its path bisected the Merambong shoal seagrass bed, smothering much of the bed and restricting water circulation vital to its ecology. Rahman, who later met with Country Garden representatives, related that they were ostensibly ignorant of seagrass ecology and the damage done by reclamation. She noted that "they were genuinely amazed by what we were telling them [about the seagrass]" and thought they "actually want to do something to make up for how much they have screwed up already." She attempted to assign blame to "local parties," who were insistent on "pushing this [Forest City project] through."<sup>79</sup>

## Confusion, CGPV response

Among Johor officials, there was a great deal of confusion and misinformation surrounding the Forest City project. By the beginning of June 2014, the project had attracted substantial attention, and authorities were now under heavy scrutiny. Responding to inquiries from the now-defunct *Malaysian Insider*, Johor State health and environment committee chairman Ayub Rahmat said on June 23 he thought it unlikely that Forest City would have no environmental impact assessment: "It is improbable

that there is no EIA report if it is indeed required." He went on to argue that "whether it's a big or small company doing the project, I'm sure they know the law, so let's not politicize the issue until we find out facts." Yet days later, Rahmat announced that CGPV would be expected to prepare a DEIA report. He added that "given the large area involved the DEIA is crucial as it allows a better assessment of the project's potential environmental impact."

Earlier in the week, Johor DOE director, Moktar Abdul Majid, had defended the lack of a project EIA, contending that "as the area reclaimed is not more than 50 acres [hectares], it does not require the EIA report."82 Yet again, shortly afterwards, the Johor Mentri Besar (chief minister) Khaled Nordin claimed in the state assembly that while the project was under 50 hectares and would not require a detailed EIA, it would require a preliminary EIA: "in view that the project is inclusive of a hotel equipped with 80 rooms, the developer is required to prepare a preliminary EIA report as stipulated under the Environmental Quality Act 1974."83 Why this other provision had not been acted upon earlier to mandate an EIA (either preliminary or detailed) remains unclear. In any case, the Forest City DEIA claims that the DOE Johor "issued a letter requesting for a Detailed EIA for the proposed reclamation," on June 6, well before any of the above remarks.84

A closer look at the threshold of 50 hectares reveals it to be a flimsy rationale for failing to complete an EIA. In addition to Johor officials, CGPV also makes wide use of the argument throughout its responses to public questions and focus group discussions with nearby stakeholders. When asked variations on "how was the reclamation done before the approval of the DEIA," CGPV reliably responded that it had "obtained clearance for the reclamation for its pilot project...measuring 49.3 ha. Any reclamation project less than 50 ha does not need a DEIA study." CGPV attributed the later change in course to "developments after the initial works."

While the 50 ha threshold is legitimate, the argument is specious; it implies that any developer intent on reclaiming more than 50 ha could skirt the rules by subdividing the project and obtaining separate approvals for each phase. Environmental policy researcher Chung Yi Fun weighed in on this issue, claiming "if you reclaim in parcels of 49 hectares to circumvent the DEIA, then it defeats the purpose of having a DEIA at all." The only sensible interpretation demands that EIA requirements apply to a project in its entirety and not cherry-picked sections. Furthermore, as chief minister Khaled Nordin alluded to in the "hotel with 80 rooms" justification, a number of other provisions apply to the project that mandate an EIA irrespective of the amount of reclamation. New townships—a category for which Forest City clearly qualifies—and new coastal resort developments also mandate EIAs.

CGPV's confronted a wide range of pointed questions regarding its lack of compliance with plans and regulations. The clearest articulation of CGPV's response is found in its published answers to public questions and stakeholder discussions. Revealingly, in almost every case, CGPV declines to engage with the particulars of compliance, noting instead that the project obtained "zoning approval" from the Johor government. In particular, CGPV makes repeated reference to a letter from UPEN Johor (the Johor State Economic Planning Committee) received on September 3, 2014, which notes that state planners have approved the project and determined that the project did not need to be referred to the national physical planning committee.<sup>88</sup>

The implication, presumably, is that such approval is sufficient to establish Forest City's legality. Yet the letter was issued nine months after reclamation commenced—a chronological sticking point that remains unaddressed. CGPV goes on to say that Forest City will be incorporated into the relevant plans in the "near future." They also claim that "the project is approved because it will bring economy [sic] growth and benefits to the communities, state and country."

#### Outside actors: role of the Sultan

Sultan of Johor Ismail Ibrahim played the defining role in bringing about the Forest City project. The Johor monarch, also known by his royal title "Tuanku," invited Country Garden to invest at an early stage, and then himself took a large financial interest in the project. There is ample evidence to suggest that Forest City is indeed "the Sultan's project." Ismail Ibrahim's central involvement invokes another theme in the megaprojects literature: the tendency of actors outside the formal structures of planning and development to co-opt strategies and reorient objectives to suit their own interests. I Certain entrepreneurial actors, by virtue of their standing or influence, successfully advocate for large-scale interventions that are incompatible with existing planning priorities conceived through more democratic or inclusive means.

Background on Malay sultans and the Sultan of Johor
Hereditary Malay Sultans rule nine of Malaysia's 13 states. Each
rotates through a five-year term as Agong, the king of the Malaysian
federation. As noted, Malay sultans act as constitutional monarchs and
stewards of Islam. At the federal level, the Prime Minister and his cabinet
make executive decisions. Chief Ministers, or *menteris besar* in Malay,

hold executive power at the state level.<sup>92</sup>

Until 1983, Sultans wielded considerably more power, enjoying legal immunity and a royal veto over legislation. That year, the administration of Mahathir Mohamad brought in sweeping constitutional

changes intended to curb their influence. Parliament and state assemblies were empowered to overrule the royal veto following a prescribed waiting period. Subsequently, in 1993, royal families were stripped of legal immunity following allegations of assaults on citizens in Johor, including by the current Sultan's father and younger brother. Mahathir justified the changes on the grounds that the monarchs could not be trusted to act on the advice of elected officials, as in the UK. He also reflected on Malaysia's colonial history, where "rulers could be so easily persuaded to make wrong decisions."

In theory, therefore, Sultans in Malaysia are now closer to figureheads. In practice, however, they remain immensely influential in both the economic and political affairs of their states. Chief Ministers, for example, are still appointed by the Sultan in a number of states, including Johor.<sup>95</sup>

Born in 1958, the current Sultan of Johor, Ismail Iskandar, enjoyed a highly international upbringing. He is the son of a Malay father, Johor Sultan Mahmud Iskandar, and a British mother, Josephine Trevorrow, who adopted an Islamic name after marriage. The two met while Mahmud was studying in the UK. Ismail trained as a military officer and studied diplomacy and international relations at Tufts University. He reportedly completed coursework related to the International Laws of the Seas, later to prove relevant in disputes with Singapore over reclamation.<sup>96</sup>

After ascending to the crown on the death of his father in 2010, Ibrahim has been intensely active in the business affairs of the state. He made several notable investments and acquisitions in past years, including a 20 percent stake in Berjaya Times Square (reportedly worth RM 250 million), a shopping center in Kuala Lumpur, and a majority stake in REDtone international, a Malaysian telecom provider, among many others. Serina Rahaman, a Johor resident, posits that the Sultan pursues such deals, especially opportunities in Johor, in an effort to edge out "federal level cronies," who might otherwise dominate local players. 97 As of 2015, he had reportedly amassed a personal fortune exceeding \$1 billion. 98 He lives a high-profile lifestyle with the full trappings of wealth and royalty, including several palaces in Johor, a customized Mack "palace truck," and a Boeing 737.99 The Sultan has in the past faced allegations of criminal misconduct, including several assaults in nightclubs and even a shooting, all of which were dismissed because of immunity rules then in place. 100

In spite of the fact that he already exerts great influence in Johor, the Sultan has repeatedly sought to consolidate and increase his power. A bill proposed in 2014 to address affordable housing issues would have given the Sultan uncontested power to appoint members of the new housing board, set their pay, and even dissolve the board. The law was eventually modified to shift these powers to the state government after it

encountered heavy resistance. In December 2015, the Sultan unilaterally declared a ban on electronic (or "vape") smoking devices. The sudden decree immediately raised issues of due process. Legal experts contended that "the Sultan as a constitutional monarch cannot just issue a decree on vapes." Most recently, the Sultan has called for the federal government to repeal earlier amendments that limited monarch's powers. The Johor ruler claimed "it is not proper to limit or abolish the power of the King or Sultan in examining and giving their royal assent to laws." Perceived weakness in the federal government, in the throes of an ongoing financial scandal, may be encouraging the Sultan's ambitions.

#### Deal with Guangzhou R&F

Of all the Sultan's ventures, his investments in Johor property have proved most controversial. One deal in particular with Chinese developer Guangzhou R&F sheds light on his dealings with Country Garden. In December 2013, the Sultan reportedly made RM 4.5 billion through the sale of 116 acres of prime land flanking the causeway in Tanjung Puteri, at the heart of Johor Bahru. 104 The area had formerly been owned by the state government and was acquired by the Sultan for roughly RM 200 million, an order of magnitude less than his subsequent sale to Guangzhou R&F. Facing public and press scrutiny over the deal, the Sultan explained his actions in an interview:

For example, the Princess Cove project [by Guangzhou R&F] in Tanjung Puteri. Some people wanted the land for free to be injected to some major public listed companies. There were two people who wanted the land...An independent evaluation was done on Tanjung Puteri and a price was offered based on the market value. I paid the government above its market value [for the land]. I rounded up the figure offered and made the government an offer they could not resist...I did not take the land free of charge. I paid extra for the land because I want the state government to make money, which will be channeled back to the people. 105

In what he termed a "transparent dealing," the Sultan claimed he had essentially paid double for the land, which was assessed by the government at RM 100 million. He then entered into a joint venture with the developer Guangzhou R&F, somehow acquiring a 30 percent stake in the project. The Sultan then explained how he managed the RM 4.5 billion deal:

I have a 30 per cent share with the joint venture company. I foresee a RM 100 billion gross development value (GDV). Under the normal industrial norms, you will make at least, even in the worst scenario, between 20 and 25 per cent in profits. So I did basic arithmetic. What is 30 per cent of 20? That is six billion. That is the profit at the end of the day in 10 years by looking at the GDV. But, do I want to wait 10 years? Would I know when the market will weaken?...I am not willing to take that risk. I asked for my profits in advance and in return, I offered them a RM 1.5 billion discount. That is how RM 4.5 billion came up. I did not sell but I took profit in advance...I didn't lobby anybody. It was a transparent deal that will see Johor progress in the future. 106

The Sultan did not elaborate on the specifics of the joint venture or how much he had invested in order to acquire his 30 percent stake. Assuming as given the Sultans 20 percent profit figures, this suggests that investment in the project would have totaled RM 80 billion, placing the Sultan's share of investment at RM 24 billion. It is evident the Sultan did not invest this amount, given that it would exceed his net worth several times over. More likely, he was granted his stake in the development for facilitating the land acquisition, or for other unexplained reasons. His math, moreover, departs from conventional financial models. Any reasonable discount rate for a speculative project like that of Guangzhou R&F would yield a vastly lower value for profits in the present term.

The Sultan's deal with Guangzhou R&F came amidst a dramatic growth in large-scale real estate projects launched by Chinese developers. Local Malaysian developers worried that the market could become rapidly oversupplied. The government in 2013 had already implemented "cooling down measures" intended to stem rising property prices and speculative buying. Malaysian developers were responding by scaling back new launches or shifting to landed properties. Some also questioned whether the Sultan's "sale of prime state land to China" was "politically insensitive." Both the ruling and opposition parties took issue with the sale of land to foreigners.

Yet there was little vocal opposition to the Sultan's deal. The Sultan is held in great esteem, even awe, by Johor citizens. Malay *adat*, referring to customary practices and tradition linked to Islam, in general prohibits opposing the Sultan. As a traditional Malay monarch, publically criticizing him is "seen as a social taboo." An unnamed Johor businessman interviewed by *Malaysiakini* (an independent media outlet) confirmed that "yes, there is definitely a fear factor." Concerns over repercussions are well grounded; in the past, critical bloggers have been threatened with colonial era sedition charges. Off the record, however, Johoreans

expressed deep dissatisfaction with the Sultan's business activities. A Johor lawyer quoted by *Malaysiakini*: "With all due respect, he (the Sultan) shouldn't be involved in business. This is the first Sultan known to Malaysians to sell land to China. And it is prime city land. It is unprecedented."

The same lawyer further argued that royalty should be "above politics." Given that the Johor Sultan receives a generous RM 27,000-a month allowance<sup>112</sup> from the government, "they don't need to be in business." His influence and special role suggest that it would be difficult, if not impossible, to compete with the Sultan. The Sultan, for his part, argued that since he did not bid on projects, he was not in competition with others: "I am not like any ordinary businessman...I buy shares. I sell shares. I study about shares."

#### The Sultan's role in Forest City

Given his history of business dealings and record of close involvement in Johor affairs, it is unsurprising that the Sultan initiated the Forest City project. As he explains:

Forest City, which will be built in southwest of Johor, was my idea. I brought the Forest City investors in. The developers took into consideration my ideas. The investors visited the proposed site and established that it was strategically located. They have confidence in the government and me, and they are also comfortable here in Johor, which is peaceful, united, and strategically located.<sup>114</sup>

The Sultan went on to claim that the project would generate income for the government through fees and quit rents. People in Johor would benefit from "spill-over effects," including retail opportunities and "upgrading our transportation system." He further claimed it would create 250,000 job opportunities for residents of Johor. The Sultan dismissed concerns over Chinese investment, asking "what is wrong if developers from China what to invest in Johor?...we have an open-door policy; every reliable investor is welcome to invest in Johor." He added "if there are any Americans, Britons, Australians...who would put money in Johor, they are welcome, but where are they? . . .The Chinese have the confidence and foresight to believe that their money is well spent [here]." 116

According to media reports, the Sultan had been concerned that development and investment had been spread unevenly across the Iskandar Malaysia region. Othman Yusof, the executive director of CGPV, later commented that "this area was spotted by our sultan, who in fact wanted to see balanced development." Under the Iskandar masterplan

prepared by IRDA, the southeastern side of the state had become the focus, while the southwestern edge was being ignored. 117 Yusof added that "We have a sultan who is very visionary...he is the one who urged investors to come in, to convince investors—which is Country Garden – to come to invest in this area."

Country Garden's regional president for Malaysia, Kayson Yuen, stated that the company studied the project for more than a year before they decided to invest. 118 If true, this would suggest that the Sultan first reached out to them some time in 2012, before Country Garden had even announced its first Malaysian project in nearby Danga Bay. Michael Grove—a partner at the planning firm Sasaki, which is providing master-planning assistance for Country Garden—suggested that Danga Bay was merely "a way to get a footprint early on...build relationships and test the market." He suggested that it was "a case study," implying that Country Garden had much grander ambitions from the outset. 119

Dr. Serina Rahman suggests that Forest City is part of a larger political power play by the Sultan. Since the project lies entirely within the concession boundary for the Port of Tanjung Pelepas (PTP), it seriously compromises the port's ability to pursue its current expansion plans. PTP is operated by federal interests, and has enjoyed historically poor relations with the nearby kampong communities, who are generally staunch supporters of the Sultan. Seen in this context, Forest City is a means of asserting Johor state control over a federal outpost. 120 Even if there are local impacts, the Sultan could then claim, as he has on several occasions, that the project is expressly for the state, while the port represents outside interests. Maimunah Jaffar, the head of planning and compliance at IRDA, further notes that "anything with no previous legal ownership arrangement belongs to our king and to the sovereignty of Johor. That is why reclamation can be the easiest way to bring in economic growth, because land belongs to the state and most importantly, it belongs to the Sultan."121

Jaffar's conflation of the state and Sultan speaks to the latter's influence, but does not acknowledge the complex web of authorities with control over the site of Forest City. CGPV reportedly paid a land premium of RM 225 million to the Johor state government for titles to the marine area that would become Forest City. Malaysia's National Land Code holds that any individual or organization can apply for "any state land." If the application is approved, a leasehold title of no more than 99 years is granted, and a fee, called a "land premium," is due to the state. The amount is determined by state assessors based on "market value...which takes into consideration the land use applied for," yet comparable cases suggest that the assessments are drastic underestimations. For its Danga Bay project, Country Garden spent RM 900 million for a mere 22.26 hectares from Iskandar Waterfront Holdings, 124 a private company headed

by property magnate Lim Kang Hoo. By contrast, the Sultan reported that 116 hectares of prime land in Tanjung Puteri was valued by the state at RM 100 million. He reportedly "paid double," but proceeded to enter into the deal with Guangzhou R&F that would net him RM 4.5 billion. 125 While both Tanjung Puteri and Forest City required extensive land reclamation—which would suppress the value of the title—such dramatic price differentials suggest that state assessments bear no resemblance to true market value.

As he had done with Guangzhou R&F, the Sultan entered into a joint venture with Country Garden Holdings Ltd. to carry out the Forest City project. The new corporate entity, Country Garden Pacificview Sdn. Bhd (CGPV) was a 66 percent-34 percent split between Country Garden Holdings Ltd., the majority shareholder, and Esplanade Danga 88 Sdn. Bhd., representing the Sultan's interest. 126 For months, however, the media reported that Forest City was a joint venture of Country Garden and Kumpulan Prasarana Rakyat Johor (KPRJ), Johor's public investment arm. This concealed—or at least downplayed—the Sultan's involvement, giving the impression it was a partnership in the public interest. But according to corporate filings, KPRJ owned only 20 percent of Esplanade Danga 88—and potentially less, when the type of shares it was issued was taken into consideration. The remainder was controlled either directly by the Sultan or by Daing A. Malek, a member of the royal court of advisors and the Sultan's close associate. 127

Speaking well after reclamation began, CGPV executive director Othman Yusof implied that the Sultan was somehow magnanimous in voluntarily giving some shares to KPRJ, since "he could have just done it by himself with Country Garden." Later asked if it was misleading to represent KPRJ as the primary local partner, Othman Yusof simply noted that "representatives of KPRJ also sit on the board of CGPV to oversee the operations of the company." The more complete corporate breakdown only emerged publically in mid-July 2014, as a result of investigative reporting by independent news outlet *Malaysiakini*, for which it won an award. 129

It remains unclear how the Sultan managed to acquire such a large stake in the project at an early stage. As with Guangzhou R&F, the Sultan appears to have been given the stake in exchange for facilitating Country Garden's venture in Johor. According to Serina Rahman, a resident near Forest City, "the family of the sultan always gets a stake in these types of projects." Furthermore, Rahman adds, "the Sultan is quiet about his stake; often the race aspect comes out when people are angry it is a Chinese project, but the role of the Sultan is often ignored." While clearly contrived for personal gain, Forest City demonstrates the Sultan's adeptness in managing his public image. Early reports of the project suggested it would house a stadium for the wildly popular Johor football

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team.<sup>131</sup> CGPV is a top sponsor and its logo is displayed prominently on the team's jerseys. Rahman concludes that the Sultan is adept at "bread and circuses," and ultimately believes that he can act with impunity, since Johor is effectively "his people and his country."<sup>132</sup>

When Forest City had subsequently stalled to complete its environment impact assessment, the Sultan lashed out the federal government for its perceived meddling. Speaking at the opening of a session of the Johor state assembly, he underscored the importance of environmental issues, but proceeded to condemn "irresponsible quarters" who use the EIA as a weapon to stop development. The Johor ruler suggested that states, and not the federal government, should have final jurisdiction over environmental matters, and that "a state environmental body should be set up." More broadly, the Sultan criticized external influence in Johor affairs, arguing "Johor is for the people of Johor and only the people know the conditions and needs of the state, so why are there outsiders who are trying to interfere." In another speech, the Sultan openly criticized the actions of the federal DOE, saying "such action obstructs the state's development and causes investors to run elsewhere."

The Johor Sultan's interest in land reclamation projects extended well beyond Forest City. He was also behind the 1,410 hectare Benalec Holdings Oil Terminal, a project not far from Forest City, to build an industrial oil and gas hub. The Sultan's son, Johor crown Prince Ismail Idris, and his associate Diang A. Malek were named directors of the project. He Johor Sultan has extensive interests in the business of sand extraction through the firm Mados Sdn Bhd. It holds concessions to harvest sand from Raimuna Shoal, off the east coast of Johor, incidentally where sand for Forest City is being sourced. The company had earlier come under scrutiny for operating without an EIA in spite of federal requirements, and preventing fishermen from entering the concession area. A lawsuit by fishermen proved unsuccessful, but drew sympathy from Johor politicians, who described their plight as "having sand thrown in their rice bowl." The Sultan appears to be involved at every stage of the value chain.

# Lack of engagement and conflict with local stakeholders

As monumental endeavors backed by powerful interests, urban megaprojects have been found to undermine processes of public participation and democratic engagement. Given their status as "exceptional," 138 they are not subject to the same standards of public accountability applied to general urban development. It is clear that Forest City was conceived of and enabled by the Sultan and an ambitious

Chinese developer in absence of public review, or even public comment. The communities closest to the project learned of its existence only when ships began dumping sand into the Straits of Johor. Virtually everyone involved—from local politicians to environmentalists and government figures in Singapore—was taken by surprise.

Yet CGPV's lack of public engagement continued well after reclamation began. A public meeting in September 2014 was the company's first major community outreach effort, and only occurred as a mandatory aspect of the DEIA. When they misrepresented the community's support, CGPV bore the brunt of public anger. One *Star* editorial proclaimed the project—the largest land reclamation effort ever undertaken in Malaysia—as "a seemingly classic story of rampant big business, huge profits and nagging controversy." 139

## Lack of engagement

According to teacher and local Kampong Pok resident Baktiar Jaffar, Forest City was an "instant noodle project"—it appeared out of nowhere. Though the later EIA claims CGPV consulted locals, he was not aware of anyone who knew anything about the project at the time reclamation began. Fishermen similarly claimed that no one in their villages had been consulted or even notified before barges arrived and began dumping sand in the Straits. Habu Talib bin Khamis, who lives in Kampong Pendas nearest Forest City, noted that company representatives later talked to village heads, but that only came weeks later. In any case, the village heads neglected to pass on any information.

Opposition politicians, particularly those representing the districts near the project, were among the first to realize that something dramatic was stirring in the Strait. Cheo Yee How, DAP Johor State Assemblyman, recalls that an island suddenly appeared where only water and seagrass had existed before. 144 He and his colleagues had received no warning or advanced notice, having instead been tipped off to the reclamation activity by local fishermen. He and other DAP members—such as Lim Kit Siang and Boo Cheng Hao—made repeated inquiries of the Johor state government, but were mostly rebuffed; the government divulged few details, and simply claimed the project would be beneficial for the state. 145 It was only much later, after Country Garden was forced to complete a DEIA statement, that they learned details of the project, along with the general public. The complete lack of consultation was a serious concern for How and his political colleagues, who couldn't even find a "signboard bearing the essential details of the project erected anywhere within the construction site." 146 There was a complete lack of public information or consultation, he claimed.

Some 9,400 people were estimated to live in the project's study area, defined as a 5-kilometer buffer from the perimeter of the Forest City islands. Most resided in small Malay villages, or Kampongs, which traditionally consist of large families. More than 60 percent of the population had resided in the area for 30 years or more. A sizeable fraction of residents, numbering about 250, were fishermen. The DEIA consultants estimated that there were 1,880 households in the area, and devised a 10 percent random sample of household heads, totaling 180 individuals. Their survey found mixed perceptions of the project, with fewer than 30 percent agreeing it would bring employment opportunities to their household, but over 80 percent believing it would raise their standard of living. Virtually all respondents agreed that Forest City would shrink the fishing ground, and well over half, including almost three-quarters of fishermen, felt the existing population would be marginalized. Troublingly, only around 40 percent of the sample interviewed actively knew about the project, raising concerns that interviewers could easily bias results. Although the DEIA reports that roughly two-thirds of the respondents agreed the project was acceptable, the actual survey questions are not provided. Furthermore, fewer than 10 percent of fishermen agreed. 147

Having been the subject of media scrutiny all summer, Country Garden faced its first serious public meeting with residents on September 21, 2014, in Kampong Pok. The hearing—a requirement for the DEIA went off uneventfully until CGPV began discussing a survey they had purportedly conducted in the community, which reported that 70 percent of those interviewed believed the project would be a net positive. Cikgu Hanifi, a man in the audience, immediately disputed the survey results, saying that no one in the village had heard about it. While CGPV claims they took a 10 percent sample of household heads in areas near the project, many did not believe the levels of support. Indeed, Bakhtiar Jaffar, who has lived in the community for decades, could not find a single person who had been interviewed. He reportedly heard that "two of the families they interviewed were Indonesian."148 Local residents claimed it would lead to the loss of their livelihoods, and accused the developer of "bulldozing the project through the area without their knowledge." The dramatic upwelling of anger and pointed questions took the developer by surprise.

The media response broadly condemned Country Garden for appearing out of touch and belligerently forcing its vision on residents. Reporter Roy K. Nandi argued the project was delayed and complicated because the authorities did not engage properly with stakeholders. Despite KPRJ's (the Johor State investment arm) stake in the project, "there was no attempt at strategic communication with the stakeholders" by any of the relevant Johor authorities. At the disastrous meeting in Kampong Pok, a KPRJ officer had "chided the villagers for being anti-

development." The villagers' willingness to voice their convictions and speak back to the authorities was rare, and even more remarkable from a group of traditionally staunch government supporters. Roy saw merit in the project, but felt it had so far been a public relations disaster: "You cannot simply move in and expect the people to buy in." <sup>150</sup>

#### Major stakeholders

In addition to local residents, CGPV also failed to initially engage with prominent local stakeholders, such as rival property developers and the Port of Tanjung Pelepas (PTP). Much of what is known about their subsequent interactions is a result of focus group discussions that were required as part of the DEIA. Two developers in particular—Sunway Iskandar Sdn Bhd, and UEM Sunrise Berhad,—distinguished themselves with dozens of often pointed questions that got to the heart of CGPV's lack of communication. Sunway Iskandar, developer of a project in Nusajaya nearest Forest City, complained that the massive release of units projected as part of Forest City was not envisioned in various "control plans," and therefore would adversely impact the "take-up rate" on their own development. What had been planned as a 10-year project might now require 20 years. 151 They asked, with obvious skepticism, if CGPV was planning to compensate Sunway's investors, whose investment expectations now would have to be dramatically reevaluated. UEM Sunrise echoed this concern, warning of an "unplanned supply of properties...leading to a collapse in the property market in Johor." CGPV claimed in response that Forest City was an "international project" that would pull from a wide pool of buyers. They suggested other developers already enjoyed a "first-mover advantage," and that Forest City would be prepared for competition. 152

Similarly, PTP argued that Forest City violated the boundaries of its existing concession and severely disrupted its long-term expansion plans. PTP would have to forego two additional dock facilities to the east of its current facility, which it claimed were necessary to accommodate projected future demand. PTP emphasized its legal right under current master plans to pursue its expansion objectives, and expressed concern that it would eventually become uncompetitive with rival ports such as Singapore if Forest City were allowed to proceed. 153

CGPV responded by underscoring that the project had obtained legal land titles, and had been formally approved by the state government. Accordingly, they had "valid and legal mandatory from the authority for this development." CGPV made small concessions in resolving a small conflict involving overlapping land titles and providing some buffer between Forest City and PTP, but otherwise did not acknowledge PTP's plans or existing

rights. CGPV nonetheless expressed hope that the project could "synergize" to promote regional development.<sup>154</sup>

## CGPV response

Responding to accusations that they had not engaged with residents near Forest City, CGPV claimed that several private consultations had been conducted, and that the public dialogue in Kampong Pok served as an adequate engagement. Moving forward, Country Garden committed to fund CSR programs that would vaguely ensure local communities "benefit from and are able to participate in the project." While tacitly acknowledging that the fishermen would lose their livelihood, CGPV claimed that opportunities afforded by the project could generate more income for the fishermen than they were making at present.

CGPV explained its perceived lack of consultation with area fishermen by pointing to specific "private engagements" through PNKJS (the Johor fishermen's association) and "representatives from adjacent villages." Without acknowledging any past shortcomings, they emphasized engagements being conducted as part of the DEIA study, which required public dialogues. Country Garden also pointed to specific focus group discussions, all of which were held as requirements of the DEIA. Finally, they cited a survey conducted among villagers for the DEIA, including questions on the villagers' perceptions of the project and whether they thought the project would provide more advantages than disadvantages.<sup>156</sup>

The glaring shortcoming common to all of CGPV's statements, however, is that every single public consultation and engagement they were citing had occurred long after reclamation had begun. This comprised even "private consultations," none of which preceded the start of the project. Horever, much of CGPV's public engagement occurred because it was mandated under the terms of the DEIA; it is unclear if it would have happened at all had it not been required. In virtually every case, rules governing environmental impact assessments stipulate that all data and social research be gathered well before the development commences. Given that the project was already underway, it is difficult to rigorously gauge public opinion on the project; many may have expressed support knowing its continuation was inevitable. The widespread lack of information also raises questions about whether residents were adequately informed about the project to render legitimate judgments.

## Managing Risk

The literature on megaprojects also points to another central theme: risk management. The scale of a project heightens the consequences of both success and failure. Minimizing and managing uncertainties is at the heart of urban megaproject development. In order to win approval and maintain a favorable public image, project proponents often overstate the benefits of their investment and downplay the costs. For local communities, the burden of a project failure can be insurmountable. A central component of megaproject risk is damage to the environment, for which remediation can be immensely expensive and highly involved.

## Benefits and Risks

Again, the history of megaprojects chronicles a tradition of exaggerating benefits while understating costs. Flyvbjerg found in particular that urban megaprojects "overvalued local development effects, and underestimated environmental impacts." While the Forest City project is in its early stages, there are nonetheless a variety of reasons to believe that it too will fit this pattern. Justifications given for the project hinge on attracting development providing numerous job opportunities, but the details are either unclear or highly optimistic. Estimates and projections—even those provided by Forest City proponents—have varied widely. Many do not hold up under scrutiny. There is also systemic risk that a failure in Forest City could sour investor sentiment, and jeopardize development across the Iskandar Malaysia region.

At the same time, governments have shifted away from launching megaprojects themselves, instead courting private sector involvement through inducements and development incentives. <sup>160</sup> Often, a private developer will partner with the government or public entity. With private, or at least semi-private interests leading development, there are concerns about the "privatization of planning" <sup>161</sup> and a lack of public accountability. As a private development, located in Johor at least in part due to the incentives and favorable investment climate of Iskandar Malaysia, Forest City aligns closely with this model.

## Forest City's statement of need

The Forest City DEIA sets out a sweeping and multifaceted justification for the project. Forest City is portrayed as key to "the potential of opening international investment opportunities which would then propel Johor's economy as the main gateway in the South of the country." The project will offer job opportunities for the surrounding communities, creating a "better and more secure life for all through income generation

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and high-quality facilities and infrastructure." Furthermore, "it would likely provide a new dimension towards the creation of modern business and will be an example and benchmark in the development of similar townships and centers in the future" 162

The problem with such statements is that they are inherently speculative in nature, and lack specificity or objective criteria for evaluation. The Forest City DEIA made no effort to quantify the amount of foreign investment the project would generate or detail its broader economic impact. Statements by CGPV representatives have remained similarly vague, stressing how Forest City will "diversify incomes" and "improve the quality of life." 163

Ironically, the DEIA also argued that the project would strengthen Malaysia-Singapore bilateral relations. Forest City had the potential to "attract investors from land-starved Singapore to commit international investments as a way to benefit from the planned facilities and thereby result in gains for both countries." In fact, as it turned out, the project "ruffled Singapore-Malaysia ties." <sup>164</sup> It raised concerns in the Singapore government over transboundary impacts, which were serious enough that Singapore immediately demanded more information, including an EIA report, and sent at least two high-level diplomatic notes. Singapore argued that "Malaysia should not permit reclamation activities of this scale…so close to Singapore without first conducting an environmental impact assessment." <sup>165</sup> The issue was considered sufficiently weighty to reach the highest levels of government. Singapore's Prime Minister Lee Hsing Loon reportedly wrote to his Malaysian counterpart, Najib Razak, who faced a "serious dilemma" on how to address Singapore's concerns. <sup>166</sup>

To many observers, Forest City threatened a recapitulation of a previous dispute over land reclamation in 2003 that reached the International Tribunal for the Law of the Sea. In that case the roles were reversed, as Malaysia protested Singapore's reclamation efforts at Tuas. Although that case was settled amicably, some Johor lawmakers feared "retribution" and worried that the two nations could become embroiled in a "diplomatic row." 167

In its statement of need, CGPV emphasized that the Forest City project would involve RM 700 million in "infrastructure upgrading works" in the areas surrounding the proposed project. The road and public transportation systems in the communities of Gelang Patah, Tanjung Pelepas and Nusajaya would be the primary beneficiaries. Yet this amount is a negligible fraction of the RM 450 billion gross development value, and consists primarily of upgrading roads to serve the development. Hana Badriah, a planning officer at IRDA, noted that road construction "will accompany greater amounts of traffic, so I'm not sure it is a very strong rationale." The DEIA suggests that a six-lane access road will be required to link Forest City with the region's existing highway network, while other

local roads will need to be widened to four-lane dual carriageways. These upgrades, even if financed by CGPV, will have myriad impacts of their own and dramatically alter the character of the Tanjung Kupang, the Johor district closest to Forest City. Since expressway construction is a "prescribed activity" according to Malaysian environmental law, it is possible that Forest City's access roads would themselves demand an environmental impact assessment. There is no indication of the costs of these road projects or how the proposed RM 700 million in upgrades would be budgeted.

Forest City has a projected population in the hundreds of thousands, <sup>168</sup> yet CGPV has given few indications of the immense supporting infrastructure required and how it would be financed. In its focus group discussion with Johor stakeholders, CGPV declined to address whether Forest City would result in "constraints" or "bottlenecks" in utility supply for other developers. It claimed that as a "30 year project," it would "work with the relevant authorities to incorporate the entire development to ensure sufficient capacity." CGPV ultimately placed responsibility with the local authority, which would be required to "ensure smooth construction and supply to the project along the pipeline." According to Hana Badriah, in meetings with IRDA, CGPV responded "to every question about how they would provide power, water and other things [by saying] that they would tap into the current system."

While existing infrastructure may have been sufficient for smaller projects, the scale of Forest City suggested they "need to do something more." As a case in point, Forest City's projected water consumption is around 40 mgd (million gallons a day), more than a fifth of all the domestic water consumption in Singapore. Yet as of summer 2015, Johor has faced water shortages and record low reservoir levels that have prompted rationing programs. For a project of its size, Forest City has not adequately addressed how its infrastructure requirements integrate with those of Johor.

Comments from Jeffrey Yee, an executive at rival Chinese developer Guangzhou R&F, reveal that the very different development environment in China may account for CGPV's casual approach to meeting infrastructure needs. In China, according to Yee, townships are planned ahead by the government, and a non-negotiable contribution fee covers all infrastructure connections. The developer only needs to interact with local representatives of the state. In Malaysia, the situation is very different. Yee reports that Chinese executives at his firm ask "why do we have to deal with so many agencies?" They are required to interact with the state, local authority and the federal government—a very different state of affairs than what they are accustomed to in China. 172

#### Economic case

The economic case for Forest City hinges on creating job opportunities for surrounding communities and more broadly in Johor. Yet predictions of the number of jobs generated span a wide range. The DEIA gives a figure of 62,200, which aligns with statements from CGPV executive director Othman Yusof in September 2014. By March 2015, however, Yusof estimated 200,000 to 250,000, even as the project's gross development value was revised downward by 30 percent. Subsequent reports have also used this range, adding that Forest City would also provide free education to locals in vocational and technical schools. This more recent estimate is comparable to estimates of Forest City's projected population of 300,000.

Since nearly half the project is devoted to residential use, while only a quarter is commercial, there is reason to conclude that such jobs figures are unrealistically high. The Furthermore, Hana Badriah at IRDA questioned whether the types of jobs available would be suitable for local residents: the jobs that I think they will create really don't appeal to Malaysians anyway. Construction and basic service jobs are relatively low paying, and are mostly filled by migrant laborers.

After action from the state government, CGPV agreed to contribute to a fund that would support fishermen affected by reclamation works. Yet they were ultimately unsympathetic to their cause, implying that the fishermen and villagers were backward people who needed to "modernize." While they would provide some compensation in the near term, they argued that in the future fishermen would need to "change to an alternative venture of becoming modern fishermen." They actively suggested that young generations should be "steered away from becoming fishermen and engage in modern sectors and industries." Naturally, they considered opportunities in the Forest City project implementation a "viable option."

Yet for people who have maintained a way of life for generations, it is no small order to retrain and integrate into the larger capitalist economy as service workers. Furthermore, because of internal politics and the particular hierarchy of the Fishermen's association, which would collect the funds from the state government, the benefits would be distributed unevenly. Those who were career fishermen but lacked a particular license would receive nothing, while others would receive a one-time payment.

Estimates of the project's population have a similarly high degree of variability. Sources report the Forest City population ranging from 300,000 to 700,000.<sup>179</sup> Even at the low end of this range, given that roughly half of built space will be residential, the population density would be comparable to some of the most crowded urban areas in the world—central Manila

and Hong Kong. 180 While the width of the range is troubling, the implied density would effectively undermine the salubrious, open vision presented in Forest City's promotional materials. Green space is only to occupy 12 percent of the project, despite images of endless greenery and spacious common areas. 181

Financing a project the scale of Forest City also raises legitimate questions. As of September 2014, CGPV's "current authorized paid-up capital" was only RM400,000 and was presumably operating with just enough funds to cover the costs of reclamation. CGPV executive director Othman Yusof claimed "we will initiate discussion with potential financiers as soon as we have obtained our DEIA and planning approval. Potential financiers will be both local and international. For the time being, all funds are [being] generated by internal financing." Later, in fall 2015, reports emerged that CGPV was issuing a "sukuk" or Islamic bonds of at least RM 1 billion, potentially in an effort to reduce foreign exchange risks. Reports indicated that it was a "tough sell," given perceived oversupply in the market, and that the company would have difficulty "convince[ing] investors to take a credit risk." 182

Past urban megaprojects have a mixed record, with many high-profile failures. Changing economic circumstances can spell the end for even the most promising projects. In the wake of grand ambitions are left "ghost cities," such as Muang Thong Thani outside Bangkok. Yet in its DEIA and throughout its public comments, CGPV has reliably neglected to mention the risk its failure could pose to the many other projects in the region and possibly even the Iskandar Malaysia enterprise as a whole. In this vein, an executive at rival Chinese developer Guangzhou R&F, Dr. Jeffrey Yee, said that he earnestly hoped Forest City would succeed: "As a competitor, I wish that all the developers will be successful. If I see one of these fail it will impact adjacent development—investors will be thinking about related cases and examples. One failure could undermine the whole premise of development here." 183

Since Forest City entered the scene unannounced and external to any comprehensive plans, it is highly disruptive to nearby developers, such as UEM Sunrise and Medini Iskandar, which worried that Forest City will cause an oversupply in the property market. Be Despite CGPV's assertions that Forest City is an "international project," and hence will draw from a different pool of buyers, the promotional materials of these other projects suggest that they are targeting a similarly affluent, worldly, and "international" clientele. Moreover, the scale of reclamation involved in Forest City prompted worries at UEM Sunrise that it would disrupt views, restrict access for boats anchoring in Medini Harbor, and otherwise undermine its development. CGPV's claims to benefit the region must be viewed skeptically if those benefits simply come at the expense of existing projects that are integrated in a comprehensive plan.

#### "Do no harm"

Forest City reflects many of the trends affecting megaprojects that have come to characterize the modern era of large-scale urban developments. Following a disastrous record of large-scale urban development interventions—through programs such as urban renewal—megaprojects have sought to mitigate impacts as much as possible, or at least give the appearance of doing so. Whereas in the past projects would be approved if overall benefits outweighed costs, including displacement and environmental damage, now they are given more scrutiny. Ironically, while Forest City may have tremendous impacts on the natural and social environment of its surroundings, aspects of the project also align with this modern "do no harm" 187 paradigm.

Forest City's reliance on exclusively reclaimed land makes a strong case for a development strategy that strives to minimize displacement and impacts on existing land. As an "international project," Forest City demanded a high-value coastal site, but even this did not necessitate such a large degree of reclamation. Dr. Jeffrey Yee at rival firm Guangzhou R&F was baffled as to why Forest City was being reclaimed as an island: "You could always extend the shoreline at much lower cost." While other projects in Johor involved land reclamation, including Country Garden's previous Danga Bay venture, none planned to build exclusively on new land. CGPV's published answers to public questions are therefore telling: "To make sure the project creates economic benefits and is viable, the project proponent needs a sizeable land bank. Reclamation is the best alternative when all aspects are considered, including to minimize the social impact due to land acquisition." 188

While land reclamation would ironically become associated with social impacts on fishermen, it seems the decision was made to minimize public friction and opportunities for opposition. Even considering the immense cost of reclamation, it must have been seen as preferable to skirmishes with villagers over their land. In a public statement, Othman Yusof echoed this sentiment when claimed that acquiring existing land would create a list of social grievances through displacement. <sup>189</sup> A separate CGPV FAQ notes that the scale of the project necessitated a large land bank, which could be assembled most easily through reclamation. They argued that this would minimize overall social impacts. <sup>190</sup>

# Environmental damage and threats to sustainability

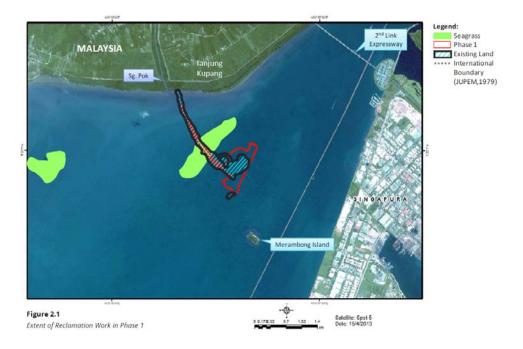
Several authors have characterized urban megaprojects as serious concerns for urban sustainability, whether in the form of sprawl or threats

to the natural environment.<sup>191</sup> As tremendously scaled projects, their impacts can be correspondingly immense.

Forest City, while still in its early stages, has already exacted a substantial toll on the natural environment. For the first several months, reclamation proceeded without any form of ecological mitigation, which caused lasting harm to the seagrass bed. While Forest City terms itself an "ecological" development, the project is not sustainable in any comprehensive sense. As Gardner argues, true sustainability must encompass the entire urban realm and not selective portions. Even if the project provides internal public transit, for example, it is still dependent on the automobile to connect anywhere outside the development. The project's arrival outside comprehensive regional development plans exacerbates this disconnect. Finally, Forest City's reactive planning—adjusting its project quickly to suit the market—raises questions of how CGPV can accommodate sustainability objectives while simultaneously adjusting to the market.

### Environmental threats posed by Forest City

The Forest City DEIA acknowledges the environmental and ecological significance of the Forest City site, drawing particular attention to the seagrass beds. Ironically, then, the report admits that the first phase of the project was "conducted without considering inputs from hydraulic and environmental assessments." CGPV made use of almost no "mitigation measures" during this phase, with the result that "significant environmental impacts" occurred on the site. The most egregious case involved an access causeway built by dumping sand directly on the seagrass that "completely destroyed" 3.96 hectares of the bed, splitting the valuable ecosystem in two. 192 Local observers and environmental advocates suggest that the impact on the eastern portion of the seagrass was in fact much greater than even the DEIA admits. The causeway blocked currents that flush sediment through the region, which had by August 2015 already decreased both the diversity and concentration of seagrasses in the area. 193 Although CGPV committed to "undertake necessary rectification works," 194 including the complete removal of the causeway, as of August 2015 it was still in place. 195



**Figure 6.** Merambong Shoal seagrass bed and the initial Forest City reclamation. Source: Forest City DEIA Vol. 3

Marine researcher Dr. Daniel Freiss of NUS (the National University of Singapore) explained that since sand "tends not to float very far" the primary worry associated with Forest City involves large-scale changes in hydrology. 196 The long time frame of the development—estimated at 30 years—poses the greatest long-term risks. Intuitively, marine ecosystems can sustain stresses for limited periods of time and recover, but nowhere near the time needed to construct new islands housing several hundred thousand people. Even when completed, it was unclear how pollution and the release of sewage would impact the environment. Fundamentally, it is impossible to accommodate half a million people (or more) in the space of a few square kilometers without significant impacts of some kind. 197

If and when the full plan for Forest City is realized, the seagrass bed will be completely encircled by islands, isolating it from the coastal mangroves. There are mutual connections between the mangrove and seagrass communities, so there will likely be severe negative impacts on the seagrass bed. The Forest City DEIA itself admits that in order to protect the seagrass beds, the mitigation measures proposed must be properly planned, flawlessly implemented, and reliably maintained. Previous efforts to replant seagrass have not borne much fruit. As Dr. Freiss notes, if there was a suitable relocation site, it would already have seagrass on it.

## Forest City DEIA and environmental monitoring

The Forest City DEIA came under heavy criticism from a range of researchers and environmental advocates. Ironically, the same company that Country Garden retained to complete its DEIA—Dr. Nik and Associates—contributed to the Iskandar Malaysia Shoreline Management Plan, which established that no further development would happen on the site. The firm was presumably put in the unenviable position of having to justify a project that ran entirely counter to an environmental plan it previously had helped shape. 201 Vincent Chow, adviser to the Malaysian Nature Society, criticized the Forest City DEIA on the grounds that it lacked scientific data and did not adequately address the impact of largescale reclamation on the Straits of Johor. Most data were from secondary sources and not collected specifically for the study, he noted. The report mentions serious sediment impacts on the Johor Straits, but did not indicate which seagrass species would be affected, or how long they could survive the sediment-related stress.<sup>202</sup> Additionally, Chow insisted that the proposed mitigation measures were not sufficiently detailed, a perspective shared by environmental researcher Lena Wong of UPM (Universiti Putra Malaysia). 203

Save our Seahorses, an environmental NGO based in Johor, felt the DEIA was "inadequate," and did not fully address their concerns for the seagrass bed. They were heartened that the new landform of the project no longer covered the seagrass, but felt much more monitoring and mitigation was warranted.<sup>204</sup> A UPM researcher who was later employed in monitoring work by Country Garden, Lena Wong, questioned how a DEIA report could be completed over the span of just a few months. A year or more is necessary to capture the full extent of seasonal variation, she argued. She, like Vincent Chow, noted that most of the data was qualitative, and so was useless as a basis for environmental monitoring. Lists of species were provided, but there was no data concerning distribution or relative frequency. She suspected that "it is mostly old data" the consultants "threw together." 205 Bakhtiar Jaffar also questioned the legitimacy of data collection based on his conversations with fishermen who ferried the consultants out in their boats. They reportedly recorded GPS points for the project in a haphazard fashion and just had the fishermen take them "wherever."

Lena Wong, who is working as part of a team to conduct environmental monitoring at the Forest City reclamation site, went on to question the authorities at the federal DOE, suggesting that "we can write anything we want in these reports since no one there seems to care." She and Bakhtiar suggested that ministers at top levels may not have any real competence in their supposed department, since they are frequently shuffled around. She questioned whether anyone on the panel reviewing

the Forest City DEIA was knowledgeable enough to interpret and revise the document. They had apparently provided a number of monitoring recommendations that "just don't make sense." 207

Meanwhile, local politics has compromised the DOE at the state level. Bakhtiar alleged that the former state executive for the environment had been "hiding" after blocking too many high-profile projects. New projects are now not subject to significant review, he claimed. Monitoring for the project also came under question. Some of Country Garden's remote monitoring stations were set a great distance from the reclamation site, presumably so they would remain in clear water and fail to register any disturbances.<sup>208</sup>

# Forest City in the context of sustainability in Iskandar Malaysia

A Forest City promotional brochure suggests that the development is "surrounded by more than 10 km of coastline encircling a 130-acre seagrass reserve with fresh air and pristine waters." In fact, if surrounding developments proceed as projected, the project will be surrounded by a bevy of heavy industrial uses. The expanding container port of Tanjung Pelepas lies to its immediate east, with strong projected growth as it vies with Singapore for a greater share of marine traffic. Farther east, reclamation is underway for an oil and gas terminal by developer Benelec Holdings. Across the Straits of Johor sits Tuas in Singapore, an industrial and warehouse district. Around 5km from the easternmost of the Forest City islands is a live fire facility in Singapore. A visit to the mainland near the Forest City site suggests that the sounds from munitions testing are quite audible. 210

Forest City promotional materials suggest that it will be an "island oasis that grows organically" and "technologically advanced with low carbon emissions." It will include "sustainable and renewable energy infrastructures" that foster "sustainable green urbanism," all contained in a "three-dimensional urban forest." 211 Yet experts with knowledge of CGPV suggest that such promotional copy is not rooted in reality. To Lena Wong and Bakhtiar Jaffar, CGPV seemed to have very little knowledge of environmental issues.<sup>212</sup> Indeed, the initial plan for Forest City involved a monolithic single landmass that would have completely smothered the seagrass and caused much more dramatic impacts on local hydrology.<sup>213</sup> Michael Grove, the Sasaki principal who worked with CGPV in the master planning stage, noted that "there was no idea about sustainability, about ecology, about any kind of environmental factors beyond the very basic environmental impact assessment process that they had to go through." He perceived a disconnect between their understanding of the physical construction and engineering side of the project—which they know very

much about—and their understanding the environmental and political issues that they were facing."<sup>214</sup>

Country Garden's projects in China include a handful of green elements, but these hint at a superficial understanding of "sustainability." Sasaki's Michael Grove pointed to the Country Garden headquarters in Foshan, where the notion of green building involves "slapping some vertical green walls and hanging planters on the side of a very traditionally constructed building without all of the advanced technologies that we would think of as a *Living Building*, which is how they like to frame it, but it's really not." Moreover, Country Garden's previous Johor project, in Danga Bay, does not suggest a particularly "ecological" approach to landscape. Summarizing the approach, Michael Grove suggested "it leaves a lot to be desired." It includes a generally eclectic range of vegetation, much of it non-native, and clearly requiring intensive fertilizer and maintenance by grounds staff. Even so, Grove articulated an optimistic vision for Forest City:

I'm hoping that's going to be different at Forest City because it is this huge coastline with a lot of opportunity for a public realm and an edge condition that would not only support the community but increase the value of the real estate within the island but also increase the potential for habitat value in the surrounding area as well.<sup>215</sup>

While there are many inconsistencies, CGPV appears to be taking some aspects of its sustainability rhetoric seriously. In December 2015, for example, the company engaged G-Energy, a Singapore-based environmental consultant with a specialty in green building and rating certifications. The firm, while unaccustomed to working at quite the scale of Forest City, aims to achieve Greenmark certification for the entire Forest City plan. Greenmark is similar to the better known LEED standards, but is reportedly better adapted to tropical climates like those of Singapore and Malaysia.<sup>216</sup> While individually green buildings are encouraged, G-Energy's certification effort centers on plan-level priorities, like the reach and accessibility of the public transit network and the siting of various districts within the project.<sup>217</sup>

G-energy is working with both passive and active design strategies to minimize energy use and resource requirements. Leo Cher, an employee at G-energy, felt that CGPV is earnestly pursuing environmental credentials: "this is a daring move for them, since no other developers are going after green certification for a project like this...it has a lot of risks, especially since they are not familiar with the requirements and it is not a common thing for them in China." Moving forward, Cher felt that green credentials were more of an effort to attract Singapore buyers than

mainland Chinese. It appears to be more than pure promotion; Greenmark standards are reportedly quite strict and involve field verification of performance claims.<sup>219</sup>

Some of the challenges to sustainability that the company faces are largely outside its control. The development sits in Iskandar Malaysia, which promotes "sustainable development" and "conservation of the environment."220 Yet in practice, the region's patterns of development do not reflect these aims. Johor Bahru is largely automobile-dependent, with very limited public transportation. Even a dramatic expansion in public transit may be of limited effectiveness, since most of the region is low density and most new development occurs on greenfield sites.<sup>221</sup> The University Tecknologi Malaysia sprawls over such a large campus that bicycles and buses are required to travel from dormitories to classes.<sup>222</sup> Well before Forest City, planning decisions have demonstrated a lack of environmental sensitivity. Around Danga Bay, for example, a six-lane highway was routed directly through mangrove habitat. <sup>223</sup> Placed in this context, Forest City can at best become a sustainable enclave, though the carbon intensity of the luxury lifestyle of its projected buyers suggests that even this will be difficult to achieve.

#### Sustainability and reactive planning

A reactive or "dynamic" planning approach is central to Forest City's development strategy, but raises doubts about CGPV's ability to pursue its sustainability objectives. CGPV aims to continuously adapt its development to market conditions, building more or less of specific real estate products based on which are selling most successfully. As land reclamation and building *de novo* involves great fixed costs, CGPV is compelled to adapt quickly in order to maintain an adequate cash flow. While defensible from an economic perspective, the dynamic strategy may undermine master plan-level considerations with important implications for the overall sustainability, efficiency and—ultimately—livability of the project.

Anticipated public transit routes, for example, may be impossible to co-locate with the greatest concentrations of people if short-term development necessitates more low-rise villas. Too little land may be available for commercial space if residential apartments prove to be extremely popular. Countless other such scenarios could be imagined. Ultimately, an ad hoc approach is the antithesis of planning.

Country Garden is distinctive as a purely private developer undertaking such a massively scaled and ambitious project. Other Chinese developers active in Johor, such as Greenland, are state-run enterprises. Among urban megaprojects around the world, certainly the vast majority have been developed by public entities, or through public-

private partnerships. Both Nakheel, developer of the famous Palms in Dubai, and UDC—developing the Pearl in Qatar—have heavy state involvement. <sup>225</sup> Elsewhere in Southeast Asia, Saigon South is also the product of a public-private partnership. CGPV executive Dr. Runze Yu explained some of the distinct challenges they faced as a solely private developer undertaking such a comprehensive project:

You rarely encounter people who have experience on how a private sector—100 percent pure private sector [firm]—can do an urban plan for such a massive project. Usually, it's a job by the public sector or the government and they already have something on the ground. So you say that this is the urban center, this is the old town and we could put a new town there. This is the industrial there and this is more like commercial, right? So you already have a plate of things and you then move things around and see what would be the development try to look like, what would be the policy. <sup>226</sup>

Beyond the issue of expertise and experience, CGPV was constrained by economics and the reliance on private financing. Dr. Yu stressed that "we don't really have tax revenue like the public sector or can charge people for whatever. The only revenue we have is our sales." Reclaiming land has added to the dilemma, by providing a blank slate for a vast range of development possibilities. In order to "survive," the company needed a flexible and responsive strategy. As Yu puts it:

You have to maximize your profit to make yourself sustain[able]. So that really changed the landscape of the project a lot. You never know what's going to happen even next quarter. How much we want to reclaim, the land use and so on. Maybe in the current plan it's CBD but then we find villas sell good and then we just convert it into a residential for landed [property].<sup>228</sup>

Drawing comparisons to the planning process in Singapore, where the master plan is revised every five years, Dr. Yu explained that Forest City may require revisions "every quarter." Economics were to be a driving force, but this also created tensions with other development priorities such as public facilities. It also prompted worries about the character of the place they were creating. Dr. Yu admitted that this was a problem with no easy solution:

Right, so every day we look at the data of the sales and we are trying to analyze what are the good sales. But we also

don't want to make this like a bedroom town. We need to reserve land for international schools and hospitals. In the early stages it's hurting the project because we are taking lots of low-density land area. It's opportunity cost; we are not building those residentials, we are building schools and hospitals that are also needed. So you see the conflict here? On the one hand you need to make money and survive, and on the other you have to balance the entire city development. That's the challenge number one is the dynamic planning. I don't really have an answer.<sup>229</sup>

Consultants working with CGPV recognized this tension between economics and planning as a significant challenge, and expressed concerns in particular that it could compromise efforts to make the project more sustainable. Michael Grove at Sasaki described a "disconnect between what we want to do as planners concerned about the long-term sustainability of this place...[and how it] relates to their short-term construction schedule of just getting something built and open." Grove worried that his team's efforts to consider storm water, "edge conditions" and new habitats conflicted with the exigencies of CGPV's economics.<sup>230</sup>

Similarly, Veron Ng of green consultants G-Energy worried that "they will have some difficulty being true to the entire concept." Given their tremendous ambitions, "we fear they might be tempted to compromise or forego certain aspects or recommendations if they run out of time or money." She noted that Chinese developers are comfortable working at immense scales, but as a result may ignore their detailed recommendations. Agreeing with Dr. Yu's outlook, she suggested that CGPV was practicing "design on the go," based on immediate demands.<sup>231</sup>

# Marketing of Forest City and the language of globalization

The creation of Iskandar Malaysia as a special investment zone is tightly bound up in the larger processes of globalization. As international capital is perceived to be more mobile, rhetoric has shifted towards urban competitiveness, stressing the need attract foreign investment so that a city can edge out its global peers.<sup>232</sup> The associated notion of "global cities," given weight by world city rankings, underscores the importance of becoming a node in the international system of commerce and investment. Cities and metropolitan regions are expected to be "entrepreneurial" in their own right if they are to remain relevant in the global hierarchy. As a consequence, some argue that urban regions are being reconfigured to meet the needs of affluent outsiders, instead of the needs of their own

local populations. Urban megaprojects play a leading role in this process.<sup>233</sup>

# Language of globalization

Language from agencies and documents throughout Iskandar Malaysia explicitly engages with these themes. The 2006 guiding master plan for the South Johor Economic Region, later to become Iskandar Malaysia, speaks of how the federal government "identified a need for a focused and developmental approach," which "had taken into cognizance the dominant trends of our times including globalization with its increased competition in the flows of capital, human resources and ideas." The plan identifies Johor's specific advantages, including strategic geography, low-cost land and labor, and strong connectivity to other regions, but warns that such factors "unchecked and unmanaged...represent significant threats to the enduring prosperity" of Johor. Similarly, IRDA's mission statement emphasizes the need to transform the region into a "metropolis of international standing." IRDA explicitly exists to facilitate investment by "monitor[ing] the development of economic sectors," expediting approvals, and promoting Iskandar Malaysia.

Urban megaprojects represent a fundamental component of efforts to bolster regional competitiveness and attract investment. In both the structure of the project and the language used to describe it, Forest City assumes this role for Iskandar Malaysia. CGPV on numerous occasions has pronounced Forest City an "international project." 237 One brochure describes it as a "future city with global vision." 238 A promotional video goes further, claiming it will be "a pride and dream paradise for all mankind."239 Aligning with the rhetoric of regional promotion, a Forest City brochure explains the project will enhance "Malaysia's emerging status in the world."240 Predictably, CGPV also makes a great deal of Forest City's economic integration and linkages throughout Southeast Asia and beyond. One brochure, for instance, emphasizes how the project fits within China's larger "one belt one road" initiative, that proposes to link Asian economies in a modern-day reincarnation of the Silk Road.<sup>241</sup> In the spirit of international integration, Forest City is projected to "deepen the economic and trade cooperation between Malaysia and Singapore."242

# Marketing "world class"

According to its advertising, Forest City abounds with the trappings and conveniences expected to attract worldly and affluent buyers. A duty free zone on one of the islands is described as an "international shopping paradise." It will possess a "world-class" theme park. Financial and scientific institutions will cater to "intellectually advanced populations." Residents can expect medical and health industries that even include

"Swiss anti-aging" expertise.<sup>244</sup> CGPV highlights a memorandum of understanding with Shattuck St. Mary's school, a private US boarding school near Minneapolis, which is part of creating a "top notch education city."<sup>245</sup> It will also reportedly include a "media industry," "marina port," and business and financial districts."<sup>246</sup> At the same time, the project emphasizes its exclusivity. It has "closed management" and "smart security systems," presumably intended to prevent undesirable people from entering.<sup>247</sup> Amidst the endless list of amenities, one may well ask what the project *does not* provide. CGPV claims it has everything needed to "promote mutual integration as a symbiosis of capitalism."<sup>248</sup> That statement underscores the powerful market forces that appear to shape virtually every aspect of the project.

Inconspicuous or absent in much of Forest City's promotional materials are references to aspects of Malay culture or heritage. Mosques and prayer halls make scant appearances. Most of the people featured in its brochures and videos appear to be of Chinese or European origin. Architecture throughout the project makes no reference to regional influences, instead relying on greenery-clad, glass skyscrapers and villas reminiscent of Californian suburbia. 249 While CGPV promotes Forest City's "wonderful seaview," and touts its environmental credentials with "seagrass, wetlands, and mangrove conservations," the images associated with such descriptions appear to be of tropical islands that bear little resemblance to coastal Johor. 250 Beyond references to Iskandar Malaysia economic incentives, promotional materials make almost no reference to communities surrounding the project, or to other urban centers in Johor Bahru. Iskandar Malaysia is described in terms of recent projects including Legoland and the Johor Premium Outlets; otherwise, the marketing imagery is focused on Singapore, with glossy spreads of Supertrees and the Marina Bay Sands development. 251

Combining its own investment incentives with those of Iskandar Malaysia, Forest City presents a remarkable suite of economic inducements. Freehold property in Forest City is advertised as a quarter the price of Singapore with no inheritance tax. <sup>252</sup> Among many benefits, it is asserted, investors enjoy "property gain tax exemptions," "import/sales tax exemptions," and reduced tax rates for expatriate workers. Businesses can hire an "unrestricted" supply of foreign workers, while also enjoying corporate sales tax exemptions and exemptions from foreign equity restrictions. <sup>253</sup> Meanwhile, the project is not subject to standard *bumiputera* quotas that set aside a portion of developments exclusively for Malays. <sup>254</sup> It is also considered an "international zone," where a minimum purchase price of RM 1 million for foreigners does not apply. Country Garden's CEO Mo Bin claimed that the company had "received [a] state waiver for that requirement."



**Figure 7.** Rendered scene from Forest City depicting yachts, sailboats and other markers of an elite lifestyle<sup>256</sup>

Forest City's marketing targeting international elites, its tax incentives, and its exemption from requirements intended to support local residents all point to the "repackaging" of urban space for outsiders. The price of units in Forest City places them out of reach of all but the most affluent of Johor residents. Basic studio units sell for RM 500,000, while the median Malaysian salary is around RM 55,000. A handful of local residents may be able to secure employment in Forest City, although the lack of limits on international workers suggests they would face stiff competition. Many, such as the fishermen, would have to be thoroughly retrained to suit the available opportunities.

If the project's population predictions are accurate, a large fraction of Iskandar Malaysia's residents may one day live in Forest City. Yet, the development is entirely planned and executed by private interests. Within legal limits, CGPV enjoys complete freedom to shape the development as it chooses, without established mechanisms for democratic engagement present in developments elsewhere in Johor. If, as CGPV claims, Forest City is to be "a model for future cities of the world," 260 it leaves open many questions surrounding urban governance.

# Transfer agents and policy mobility

CGPV has partnered with a number of high-profile international consulting firms to guide its work on Forest City. Sasaki, mentioned earlier, contributes design and planning expertise; while McKinsey will conduct market research and Deloitte will consult on "resource"

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management and strategic planning." Meanwhile, CGPV is partnering with Huawei to craft a "smart city" strategy that encompasses connectivity and seamless integration of technology. Such firms are sometimes referred to as "transfer agents," because they facilitate the spread of policy and the proliferation of norms regarding "global cities."

This is true for Forest City. Most of the firms working with CGPV have advised numerous other projects of similar types and scales. As expert "epistemic communities," they have an outsize influence on the standards and signifiers that denote "world class." Michael Grove at Sasaki acknowledged having worked on plans for other large megaprojects, including Thu Theim in Ho Chi Minh City. While not quite at the scale of Forest City, the project involved "creating a new CBD and all of the infrastructure." Previous experience with cities in China had also "given us insight into what it takes to create a large new city with a mix of uses and transit." While G-Energy does not enjoy quite the same global prominence of CGPV's other international consultants, they also brought experience from other large-scale projects. For example, G-Energy assisted with the district-level plan for Sentosa Island in Singapore, achieving a gold+ rating from Greenmark. 264

# Discussion and conclusions Appropriating blame

While it is clear that Forest City has caused numerous environmental and social impacts, Chinese developer Country Garden Holdings Ltd. should not be the sole target of blame. As outsiders, they relied on local partners and agencies to help them navigate the approvals process and remain in compliance with the relevant regulations.

The ultimate failures, it seems, occurred at the institutional level in Johor. The Department of Education (DOE) failed to uphold its own regulations and permitted the project without review. Local councils prioritized development over the environment, and likely experienced political interference from the Sultan or his associates. A legal framework that includes state ownership of land and a federal DOE with limited capacity exacerbated the problem by limiting the federal government's ability to intervene. In fact, far from being a malicious actor, there are indications that Country Garden regretted its initial missteps in burying the seagrass, and attempted to make amends. There are also suggestions that the Port of Tanjung Pelepas (PTP) was complicit in the project. DEIA consultants, meanwhile, were under their own distinct pressures.

# Regulatory and institutional factors in Johor

Every development project, especially those at the scale of Forest City, must pass through a number of agencies and approvals. The Johor State Department of Environment stood as a gatekeeper with the authority to demand proper assessment of the project and its impacts well before the first sand was dumped into the sea. Again, given the Sultan's personal interest in the project and his considerable influence in state affairs, it appears likely that he or proxies interfered in the DOE's operations. Through cronyism or other means—the mechanism ultimately remains unclear—the DOE failed in its responsibility to protect the environment. It neglected to implement its own regulations and protocols. As UPM marine researcher Lena Wong acknowledges, The state DOE should have known, but clearly they didn't make it known or make [the seagrass] a serious priority. She feels that the state should have made environmental expectations much more clear.

In addition to the State DOE, the Johor local council responsible for the Forest City site (MPJBT—the Middle Johor Bahru Municipal Council) played an important role in approving the project. 268 Hana Badriah, a planner at IRDA, suspected that political involvement may have shifted emphasis toward development and tended to neglect environmental regulations: "The officers on the local council do the best that they can to ensure that projects comply with whatever is required. But sometimes they will provide technical advice to higher levels and it is ignored by those who are actually making decisions. "269 Either through the involvement of the Sultan or pressure to attract investment, the priorities evolved up the chain of command. While officers generally provide sound advice, Badriah suggested that "there may be some political interests in the top management."270 Furthermore, Badriah noted that environmental protection was not a priority for councilors: "They might be aware of the environment, but for them most are focused on the economic part of development. Environmental conservation is not directly incorporated into their practices."271

Land matters in Malaysia fall under the authority of individual states. <sup>272</sup> This may have inhibited effective federal action to block the Forest City project or otherwise exert comprehensive management or planning controls over the area. In the United States, for example, the large amount of federal land, especially in the West, enables the U.S. president to easily declare new protected areas as national monuments. In Malaysia, by contrast, the federal marine parks department had been working for some time, unsuccessfully, to designate a marine park around the Merambong Shoal. <sup>273</sup> UTM hydrology professor Dr. Maketab attributed the increase in reclamation to this system of state authority over land. It makes it "very difficult to maintain a coordinated national policy on land use that is balanced and controlled. I think this is one of the main follies of environmental management here—that land is a state matter." <sup>274</sup>

IRDA planner Hana Badriah concurred, noting that in Johor, "the water is seen as part of the land, which is a state matter." As a result, the state could unilaterally grant land to CGPV for reclamation, bypassing federal approval and scrutiny until the government in Putrajaya intervened on environmental grounds.

More broadly, the institutional situation in Johor and at the federal government almost certainly contributed to CGPV's initial missteps with Forest City. UTM hydrology professor Dr. Maketab Muhamad paints a disquieting portrait of Johor politics, in which cronyism and royal interference are common. <sup>276</sup> Choo Chee Kwang, a marine researcher, was "blacklisted" because he "stepped on some toes" with his advocacy work trying to protect Merambong Shoal. An associate in line to become head of the Johor DOE was effectively exiled for "stopping a barge of sand." Dr. Maketab claims there are many "sycophants, people who always follow the Sultan." The mentality among high-ranking officials is "if I have the power, I will push this through." <sup>277</sup>

### The role of Country Garden and associated actors

Multiple individuals interviewed for this thesis hesitated to blame Country Garden directly for damage to the seagrass and other environmental harms. Lena Wong noted that "Country Garden claims they knew nothing [about the seagrass], but really it's not their responsibility." While it seems reasonable that Country Garden would learn about the area where it planned to develop, regulations and plans are ultimately in place to safeguard against such ignorance. Pakhtiar Jaffar agreed, noting that "the company is not primarily at fault. The local authorities are the primary issue for allowing everything to proceed without adequate assessment. The company must deal with these authorities, so the blame is mostly on them." Pakhtian Jaffar agreed, so the blame is mostly on them.

Serina Rahman, in turn, pointed to the local Malaysian partners who should have known and understood requirements and local conditions: "the issue is they are foreign and they have local parties insisting 'it's ok'...in [public] presentations it is the locals who are pushing this through." Having received such local assurances, Country Garden proceeded with the project.

Dr. Serina Rahman also paints a picture of the Port of Tanjung Pelepas (PTP) as a complicit party. The port formally protested the Forest City reclamation in a focus group discussion, arguing that their federal concession gave them rights to expand operations in the area where Forest City is sited. Yet behind this contentious public stance, Dr. Serina Rahman suggests that PTP used the "Country Garden chaos" as a form of cover for their own expansion and associated environmental impacts.<sup>281</sup> Before Forest City, PTP had been the object of residents' contempt for

disrupting the marine environment, interfering with the fishermen's activities and failing to deliver on promises of jobs. <sup>282</sup> CGPV is clearing large tracts of land on the mainland in Tanjung Kupang for worker housing and temporary facilities to support the development. Most of that land is currently owned by PTP. Once the development is complete, Dr. Rahman suggests, PTP will resume control, free to develop it into warehouses and more port facilities. Forest City therefore fits into their long-term expansion strategy, bearing the brunt of public controversy while helping them achieve their ultimate objectives. <sup>283</sup>

The DEIA consultants, Dr. Nik and Associates, were under their own form of pressure. Dr. Nik, whom Professor Maketab claimed to know personally, did not want the contract, but had little choice, as the firm's future business depended on environmental consulting for large Johor projects that need DOE approval. Maketab further claimed that the Forest City DEIA was initially rejected because it "wasn't telling the truth" and lacked detail on predicted impacts. <sup>284</sup> At the federal level, marine researcher Dr. Lena Wong cited a general lack of capacity at the DOE in Putrajaya, claiming that they relied on her team of university researchers to keep them updated on the status of Forest City. "They are dependent on us," she noted. <sup>285</sup>

# Evaluating megaprojects through Forest City

The case of Forest City has a number of important implications for megaprojects in East Asia and beyond. Fundamentally, it demonstrates that non-compliance with regulation can prove incredibly expensive, both monetarily and in terms of reputation. Given the involvement of Singapore, the Forest City case demonstrates the limits of influence and "exceptionality." It highlights the value and importance of consultations and community engagement. Acting on local knowledge and greater compliance could have saved Country Garden both time and money. Forest City reveals that environmental considerations are not mere obligations, but valuable possibilities in their own right. Civic engagement may also pay dividends in political legitimacy that could have broad implications for the long-term success of the project.

The failure of CGPV to consult stakeholders and engage meaningfully with local plans and regulations resulted proved immensely expensive for the company. Once the federal DOE had issued a stop work order in June 2014, equipment and workers were idle, costing upwards of RM 6 million a month.<sup>286</sup> The federal DOE then mandated expensive mitigation measures for work already underway. In particular, CGPV was compelled to remove sand it had deposited on the Merambong Shoal

seagrass bed. Pulling together the DEIA at short notice cost some RM3 million.<sup>287</sup> CGPV was saddled with an extensive project redesign to accommodate a valuable seagrass bed, and to reduce its overall impacts on the environment. The project was scaled down twice, reducing its gross development value by RM150 billion.<sup>288</sup> Large-scale reclamation associated with Forest City also hastened the passage of a new (and retroactive) tax on reclaimed land, designed to support a compensation fund for fishermen who stood to lose their livelihoods.<sup>289</sup> Quick calculations suggest that CGPV contributed at least RM45 million.

Forest City also suffered the intangible costs of damage to its public image. Media coverage frequently painted an unfavorable portrait of the developer as out-of-touch, or acting above the law. While the extent of the impact is unclear, the controversy likely tarnished Forest City's brand. This potentially had an important, though unknowable, impact on future sales. CGPV launched extensive reclamation works in close proximity to the international border, in a region where reclamation is politically sensitive. Consequently, they alarmed the Singapore government and threatened an international dispute. Given that CGPV's long-term strategy targets Singapore buyers, their approach seems especially wrongheaded. During one session of Singapore's parliament, an MP from Nee Soon, Dr. Lee Bee Wah, even asked the foreign minister to "urge Singaporeans not to buy any projects at this Forest City project." 290

The environmental destruction associated with early reclamation efforts appears even more senseless, given Country Garden's subsequent reaction. Depositing sand on the seagrass appears to have been a mistake—a product of ignorance—than an act of malice. Taking what Country Garden says at face value, Dr. Serina Rahman believes they were entirely unaware of the value of the seagrass habitat. The representatives were surprised by the diversity of marine life it supported, and expressed genuine remorse for burying several hectares of Merabmong Shoal. Dr. Rahman thought that "they are trying to listen and take public comment seriously. They seem to want to do something to make up for how much they have screwed up already."291 An executive at Country Garden, Dr. Runze Yu, expressed deep ambivalence about the development process and its environmental impacts. Having worked previously for the World Bank, he reported "I'm always asking myself, what is the right rate of development? Because there is just no zeroimpact solution."292 He clarified that CGPV's position: "we don't want the mangroves along the coastline to disappear...we want the seahorses to be there. We want to protect the local environment at a maximum."293

In retrospect, even the smallest consideration given to local residents or existing plans could have saved CGPV many subsequent complications. Consulting any fisherman or planning professional would have revealed both the presence and value of the seagrass bed and

highlighted the political sensitivity surrounding land reclamation in the Straits. In its marketing, Forest City emphasizes the natural setting of the site, highlighting "seagrass and mangrove conservation." The developer has expressed intentions to make the seagrass bed a focal point of the project. Ironically, CGPV's initial actions undermined the very natural resources it intended to market. Far from being an unnecessary obstacle, conducting an EIA before beginning the project would have revealed strategies to minimize damage to the natural environment and preserve key resources, in a way that might have enhanced the project's value proposition.

This points to an important lesson regarding megaprojects: exceptionality does not operate across all scales. The Sultan may have the power to influence approvals in Johor, and potentially even at the national level, but his influence does not and did not extend over Singapore. Once Singapore's prime minister became involved, it appears that the Malaysian government had no choice but to enforce the relevant environmental regulations and halt work on the project. By relying exclusively on their local partners, Country Garden confronted the limits to exceptionality. This suggests that in many cases, there are overlapping structures of control or influence, some of which may not be immediately evident.

Although physically an archipelago, Forest City is dependent on a web of infrastructure that extends well beyond the limits of the project. It will require immense inputs of water and electricity and generate tremendous quantities of waste.<sup>295</sup> There is considerable risk around the provisioning of such utilities, especially when resources are scarce. A true commitment to sustainability would reduce these dependencies; for example, the development could rely on fewer automobiles and consume less energy. It appears doubtful, however, that Country Garden's reactive planning approach will serve these ends.

At the same time, proper engagement with the community is a key component of managing this risk. It was only after reclamation was well underway that CGPV was forced into an attitude of greater social responsibility. Consulting local residents would have given the project a sense of legitimacy that may prove crucial if, for example, water shortages force local authorities to decide between providing water for Malay communities or for an international enclave populated with outsiders.

It is evident that Forest City engages with the language of globalization. The project is marketed outwards towards an elite international clientele. Its architecture and style bear little resemblance to the forms of its surroundings. Its amenities are world-class, and yet in many respects generic. There are several other projects in Johor—some a handful of kilometers away—that market to a similar affluent clientele with their own "world-class" amenities and services. Promotional materials from

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Forest City and Guangzhou R&F's Princess Cove project both have slick renderings of glassy skyscrapers and images of busy young executives. Country Garden may struggle to distinguish itself in a field crowded with a number of smaller, but still similar, competitors.

# Lessons

Country Garden has faced considerable obstacles in implementing Forest City. The development environment in Johor is quite unlike that in China, involving as it does more agencies, authorities, and political complexities. At the same time, they probably relied too heavily on the Sultan and local partners. Initial plans were incompatible with the site. Each of these is a lesson, an opportunity to become a more sensitive and responsible developer.

Forest City represents a commitment that will play out over many decades, with tremendous responsibilities. Likely to involve over thirty years of construction, <sup>296</sup> the project will require the company to maintain and manage the development, while negotiating such issues as urban governance, utilities, and service provision. Forest City is unlike the townships that Country Garden has developed in the past; it is conceived as a self-contained city with a central business district, industry, and a strong commercial base. <sup>297</sup> If Country Garden is to realize this vision, it will have to evolve considerably as a company. The outcome will set an important precedent for Chinese development abroad.

# Lessons for Forest City

Having made their name in mainland China, it seems that Country Garden was unprepared for the very different development environment in Malaysia. Sasaki's Michael Grove noted that "being Country Garden's first development outside of the mainland, there wasn't a lot of understanding of all the obstacles they might face during the process." Dr. Jeffrey Yee, an executive at the rival Chinese developer Guangzhou R&F, offered a similar opinion: "Developing a whole township in China is different. It's all planned ahead of time by the government."

In China, Yee said, state planners would have determined basic specifications and arranged infrastructure to support those specifications. He explained how his own company was facing "the new experience of provisioning all our own infrastructure. It's really abnormal for R&F, compared to what they know." 299 Dr. Yee did not believe Country Garden adequately considered this before launching Forest City. Confirming his suspicions, Dr. Runze Yu of Country Garden acknowledged the comparative difficulty of working in Malaysia. Receiving zoning approval required "go[ing] through I think thirteen different agencies. It's incredible." He stressed that "we are not really criticizing the system or the

government...it's just the procedure you have to go through."<sup>300</sup> Dr. Yu added that they had to challenge many existing planning regulations in order to build their vision—a process that added time and complexity.

Country Garden likely placed too much faith in its local Malaysian partners and connections with the Sultan. While the Sultan of Johor enjoys immense influence, there are clear limits to his power. Dr. Serina Rahman believes that Country Garden should not have relied so heavily on either the Sultan or other Malaysian partners. 301 For Michael Grove, "the mistake was they thought they had the Sultan as this great political connection and therefore they could just move ahead without barrier." Even though the minority stakeholder was the Sultan himself, and "[Country Garden] thought they might have a lot of political capital," Grove believes that they misunderstood the political climate of Malaysia as a relatively active democracy. 302 They also failed to understand the implications of working in such close proximity to Singapore, given the often tense relations between the two countries, and their history of disputes over reclamation. A deft handling of cross-border issues was essential, especially since Country Garden sought to attract buyers from Singapore and have Forest City designated a "passport-free zone." 303

Country Garden's interactions with IRDA suggest that they were unprepared for the scope of the project they envisioned. IRDA became involved as part of the DEIA process, helping set the terms of reference for the report and commenting on drafts. Planner Hana Badriah described her sense of meetings with Country Garden:

From the start, we got the impression that Country Garden really didn't know what they wanted to do, based on how minimal their initial plans were and the kinds of questions they were asking. They just took what we proposed for them. They took the green city idea [though not vertical greening] from us, for example. They didn't really have much of a plan. They were asking about our promoted sectors and seeking to fit their development with those.<sup>304</sup>

The developer at least appears to have been responsive to IRDA's input, and desired to incorporate Forest City into their various master plans, notwithstanding their utter lack of compliance with the existing documents. A number of times, they reportedly reworded sections of the DEIA to take into account IRDA's concerns.<sup>305</sup>

Country Garden's initial plan for Forest City was developed internally, and was extremely aggressive. It proposed a massive amount of fill in a single landmass without much consideration for local hydrology. The plan ignored environmental impacts. Michael Grove of Sasaki implicates this insensitivity in the project's initial missteps: "it didn't take

into consideration any environmental issues at all, and that's when there was a lot of pushback." 306

As a developer with global ambitions, Country Garden is planning projects in many places with environmental and planning regulations far stricter than those in Malaysia. The recent launch of Ryde Garden, an 830-unit development near Sydney, is an early example. The According to Michael Grove, working in foreign settings is "still something they are still trying to navigate through and understand." Accordingly, even though Ryde Garden is miniscule compared to Forest City, it has been delayed due to difficulties in working with the Australian town planning system. These difficulties get to the heart of the broader theme of Chinese developers expanding overseas. As they aspire to launch projects in countries with a very different developer process than their own, there will inevitably be an awkward stage of learning and evolving.

By prioritizing its connection with the environment, Forest City could distinguish itself as a locally rooted megaproject. It could consider the edge conditions of the islands, and cultivate successful mangrove habitats. It could incorporate the natural environmental more centrally into the project, far beyond the veneer of "vertical greening." And, as noted, there might be substantial economic value in cultivating a sense of place, or pursuing a kind of authenticity, when responding to surroundings.

### Broader implications of Forest City

While many Chinese developers have faced significant difficulties abroad, a handful of examples seem to point the way forward. Some Chinese developers have shown great tact and sensitivity in their overseas projects. The Chinese consortium behind the Baltic Pearl in St. Petersburg, including the Shanghai Industrial Investment Company, is a case in point. They managed to navigate the difficult political environment between China and Russia while simultaneously engaging both municipal and state interests.<sup>309</sup>

While not without its critics, Greenland Group has launched numerous projects in the West, primarily through partnerships with local developers. While an open and transparent approach to development may constrain near-term profits, it generally reduces the barriers to market entry and limits risk. In Malaysia, Country Garden did hire local Malaysian staff, but remains the sole developer of Forest City. Along similar lines, while Chinese developers are accustomed to working at immense scales, it may be prudent to begin with smaller ventures abroad. Country Garden seems to have heeded this lesson with its first foray into Australia.

For Country Garden, Forest City represents a tremendous longterm commitment, where failure could be disastrous for the company. It is not a project they can simply develop and unload quickly, but one that will

require continuous shepherding over the course of its thirty-year development timeline and beyond. In working with Country Garden, Michael Grove acknowledged that "because of the scale and the timeline of the project there's a lot of understanding that they have to do it right." Even after they have invested the reported RM 176 billion (around US \$43 billion)<sup>312</sup> necessary to achieve Country Garden's vision, they will bear the responsibility of owning, maintaining, and upgrading the project. Country Garden is only just beginning to struggle with challenges of urban governance—whether the project will have its own local council, how urban utilities will be paid for, and other equally pressing issues. While recognizing the immense challenges involved, Michael Grove is optimistic that "they are going to want to continue to learn from their mistakes, and they are going to continue to improve things as they go." <sup>313</sup>

Country Garden's initial emphasis with Forest City has been on quickly delivering a product they can market to mainland Chinese buyers and thereby secure enough commitments to maintain their financing. Eventually, however, Country Garden will need to broaden its strategy to appeal not just to Chinese investors, but also to an international clientele interested in living in the project long-term. To country Garden will have to build the amenities and cultivate the business and employment opportunities that will enable people to live successfully within Forest City. Michael Grove of Sasaki believes that, in the long-term, "the reality is that they're going to have to be more robust in their construction of the public realm in order to attract more of the market base that they're hoping to achieve."

In pursuit of their long-term vision for the project as a self-contained, new global city with its own CBD, creative industries, research and development activities, and an overall "world class"<sup>316</sup> quality, Country Garden is making a tremendous commitment. It has people "staking their careers on being in Malaysia and the success of the project."<sup>317</sup> This will require a fundamental re-orientation in the company's business model and thinking. Unlike Danga Bay—which is much closer to their mainland Chinese projects as a second-home investment opportunity<sup>318</sup>—Forest City aims to be its own, integrated community that leverages close connections with Singapore. Commenting on his interactions with Country Garden, Michael Grove explained:

There's a realization that they need to understand the local climate, the political climate, the approvals process, everything from community engagement through environmentalist groups and activists. So there's a desire on their part to be more immersive. I'm not sure they've achieved it yet, and I don't think they will in the short-term, I think this will take a long time as they hire more specialists,

and bring people on board that are actually insiders from Malaysia and not outsiders from China.<sup>319</sup>

Ultimately, the Forest City project has implications not just for Johor, but nationally in Malaysia, Singapore, and the broader Southeast Asian region. As an almost unbelievably ambitious flagship project, its success or failure could signal the future of development in the region. Because other Chinese developers are no doubt monitoring Forest City's example, the project has major implications for overseas Chinese development and future megaprojects in general. Already, Forest City conveys important lessons for developers: addressing the concerns of neighbor nations, not relying on connections with local power players (especially if the goal is to circumvent local regulations), being open to environmental regulations and EIAs, and willingness to engage the federal government in addition to the state, among others. Chinese developers are moving past the stage of pursuing projects for immediate profit and transitioning to a stage of exerting "a larger impact on the world, and [being] seen as credible players in the marketplace." To succeed, Country Garden will need to look beyond "low-hanging fruit," 320 and embrace rigorous global standards.

# Conclusion

In their comprehensive study of megaprojects, Altshauer and Luberoff argue that "efforts to realize large-scale investment projects often provide an unusually revealing window on patterns of influence in urban development politics." 321

For Johor, the Forest City development provides a powerful lens through which to understand such patterns of influence. It highlights the power of the Sultan and his integral role in the development of Johor. At the same time, it exposes the limits of his influence as the developer confronted the interests of Singapore and the Malaysian federal government. Forest City speaks to the growing role of Chinese developers abroad, and also to the great challenges they face in negotiating unfamiliar contexts. It exposes a disregard for the natural environment and reveals a subsequent effort to reduce environmental impacts. More broadly, Forest City reveals significant weaknesses in the functioning of democracy and community engagement in Johor, and also spotlights impediments to federal intervention.

At the same time, Forest City is bound up in complex patterns of globalization. It is a Chinese-led project rooted in township developments in Guangdong, sited in southern Malaysia, that will attempt to leverage economic spillover from Singapore. Forest City bears the mark of an international team of consultants, contains "world-class" facilities, and

aims to attract an affluent, global clientele. It fits directly into a narrative of mobile global capital, "competitive landscapes," 322 and enclave urbanism that orients itself outwards, away from local communities, customs, and urban morphologies. As a self-proclaimed "model for future cities of the world," 323 it professes a totalizing vision of urban life that demands *terra nova*—a true blank slate for its creation. As such, it stands in stark contrast to the growing number of urbanists advocating the opposite approach to development: that is, locally oriented, humanly scaled, environmentally friendly, and sustainable projects that are endowed with an architectural character that responds to the local setting and its traditions.

Forest City remains in the embryonic stage of its development. Nevertheless, it already holds important lessons for Chinese developers operating overseas. The saga of Forest City is a kind of *bildungsroman* for Country Garden, as it evolves from a Chinese township developer to a global company, overseeing the construction and growth of a vast, integrated new city. It is too soon to speculate over the success of the project—but even if it falls short of its ambitions, it has established an important precedent for Chinese developers. Its outcome will have broad implications for Johor, the region, and beyond.

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Appendix A: List of people interviewed

Name	Title	Affiliation	Date
Abu Talib bin			
Khamis	Fisherman		8/17/2015
Bakhtiar Jaffar	Kampong Pendas resident, SOS advisor	SOS	8/1/2015
	DAP (Democratic Action Party)		
Cheo Yee How	Assemblyman for Pengkalan Rinting	DAP	1/20/2016
Cynthia Wong	Singapore resident and environmentalist		8/4/2015
	Professor, Department of Geography		
Dr. Daniel Freiss	(mangroves specialist)	NUS	7/19/2015
Hana Badriah	IRDA staff, Planning and Compliance	IRDA	8/19/2015
Harun bin Awang	Fisherman		8/15/2015
Dr. Jeffrey Yee	Vice General Manager	Guangzhou R&F	8/13/2015
	Fisherman, contract work for Country		
Lan Rahman	Garden		8/16/2015
	Professor, performs environmental		
Lena Wong	monitoring for FC	UPM	8/1/2015
Maimunah Jaffar	Director of Planning and Compliance, IRDA	IRDA	7/14/2015
Dr. Maketab	Professor, Water Quality and Water		
Mohamed	Quality Monitoring	UTM	8/6/2015
	Principal at Sasaki, Lead Designer for Forest		
Michael Grove	City	Sasaki	12/2/2015
Michelle Lew	IRDA staff, Planning and Compliance	IRDA	9/6/2015
Dr. Mohd			
Hamdan bin haji			
Ahmad	Professor, Architecture and Director of ISI	UTM	7/27/2015
Ooi Boon Leong	Secretary, Save our Seahorses	SOS	8/19/2015
Dr. Runze Yu	Regional Vice President at Country Garden	Country Garden	1/16/2016
Dr. Serina			
Rahman	Director, Kelab Alami	Kelab Alami	7/17/2015
Sharil [single			
name]	Fisherman		8/1/2015
	Manager, Engineering and Sustainability		
Veron Ng	Div	G-Energy	1/28/2016
	Director, Johor branch of the Malaysia		
Vincent Chow	Nature Society	MNS	8/12/2015

Name	Place	Elapsed time
Abu Talib bin		
Khamis	Kg. Pendas Jetty	45 minutes
Bakhtiar Jaffar	Bakhtiar Jaffar's residence, Kg. Pendas	140 minutes
Cheo Yee How	DAP Johor Office	45 minutes
Cynthia Wong	Gelang Petah	20 minutes
Dr. Daniel Freiss	Starbucks, downtown Singapore	60 minutes
Hana Badhria	IRDA office	90 minutes
Harun bin Awang	Kg. Pendas Jetty	40 minutes
Dr. Jeffrey Yee	R&F Development Sdn Bhd	90 minutes
Lan Rahman	Mamak, Gelang Petah	50 minutes
Lena Wong	Bakhtiar Jaffar's residence, Kg. Pendas	140 minutes
		45 and ~90
Maimunah Jaffar	IRDA office	minutes
Dr. Maketab		
Mohamed	Prof Maketab's office, UTM	90 minutes
Michael Grove	Remote [Conducted by Libbie]	40 minutes
Michelle Lew	Remote	N/A
Dr. Mohd		
Hamdan bin haji		
Ahmad	Institute Sultan Iskandar, UTM	45 minutes
Ooi Boon Leong	Remote	N/A
Dr. Runze Yu	Chakra Restaurant, Johor Bahru	60 minutes
Dr. Serina		
Rahman	JB City Square mall	120 minutes
Sharil [single		
name]	Serina Rahman's residence	20 minutes
Veron Ng	G-Energy Office, Singapore	40 minutes
Vincent Chow	Auntie Lim' s Café, Taman Molek	90 minutes

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## **Notes**

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- <sup>5</sup> See Iskandar Regional Development Authority. "Shoreline Management Plan Blueprint for Iskandar Malaysia," (2011), 21-25.
- <sup>6</sup> Dr. Serina Rahman, interview by author, Jul. 17, 2015; and Cheo Yee How, interview by author, Jan. 20, 2016.
- <sup>7</sup> The Sultan himself actually held 21 percent directly. Other portions were held by his close associate Daing A Malek. See Nigel Aw, "The case of Forest City and the Johor sultan," *Malaysiakini*, Jul. 14, 2014.
- <sup>8</sup> A letter from the Johor DOE is included in the DEIA Vol. 5 Sec. B4. For a more in-depth discussion of regulations, see Chapter IV "Lack of Compliance with Existing Regulations"
- <sup>9</sup> Reme Ahmad and Rennie Whang, "Housing glut worries over Johor's mega projects," *The Straits Times*, Feb. 23, 2015.
- <sup>10</sup> Forest City DEIA Vol. 1 Executive Summary, and Benjamin Nelson, "Proposed Johor multi-billion-ringgit Forest City Project scaled down," *The Star*, Jan. 15, 2015.
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- <sup>12</sup> Danga Bay was Country Garden's first overseas venture in Malaysia, located closer to region's central business district in Johor Bahru. The project resembles more closely Country Garden's township developments in mainland China. It consists of a parking podium with high-density residential towers and ground-level retail.
- <sup>13</sup> Nigel Aw, "Johor sultan 'initiated' Forest City mega project," *Malaysiakini*, Mar. 19, 2015.
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- <sup>18</sup> Ck Tan, "Malaysia-Singapore commute a daily grind," *Nikkei Asian Review*, Mar. 12, 2015.
- <sup>19</sup> Jake Maxwell Watts and Esther Fung, "Ambitious Chinese Developers Plan Cities Abroad From Ground Up," *The Wall Street Journal*, Mar. 1, 2016.
- <sup>20</sup> There are ongoing disputes over the sovereignty of small islands and reefs in the South China Sea. China continues an active program of land reclamation in a bid to claim control of the islands, which it argues also entails rights to territorial waters. Others suspect a military objective. See "Such quantities of sand," *The Economist*, Feb. 28, 2015.
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- <sup>75</sup> Hana Badriah, interview by author, Aug. 19, 2015.
- <sup>76</sup> Serina Rahman, interview by author, Jun. 17, 2015.

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- <sup>114</sup> *Ibid*.
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- <sup>155</sup> Forest City DEIA Vol. 5 Sec. B6, 20.
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- <sup>181</sup> Forest City DEIA Vol. 4 Sec. Ac, 3-4
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- <sup>185</sup> See, for example, "Somerset Puteri Harbour Nusajaya: Overview," Somerset Serviced Residence, May 13 2016.
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- <sup>187</sup> Principally, Altschuler and Luberoff, Mega-projects, 228
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<sup>&</sup>lt;sup>319</sup> Michael Grove, interview by Libbie Cohn, Dec. 2, 2015.

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