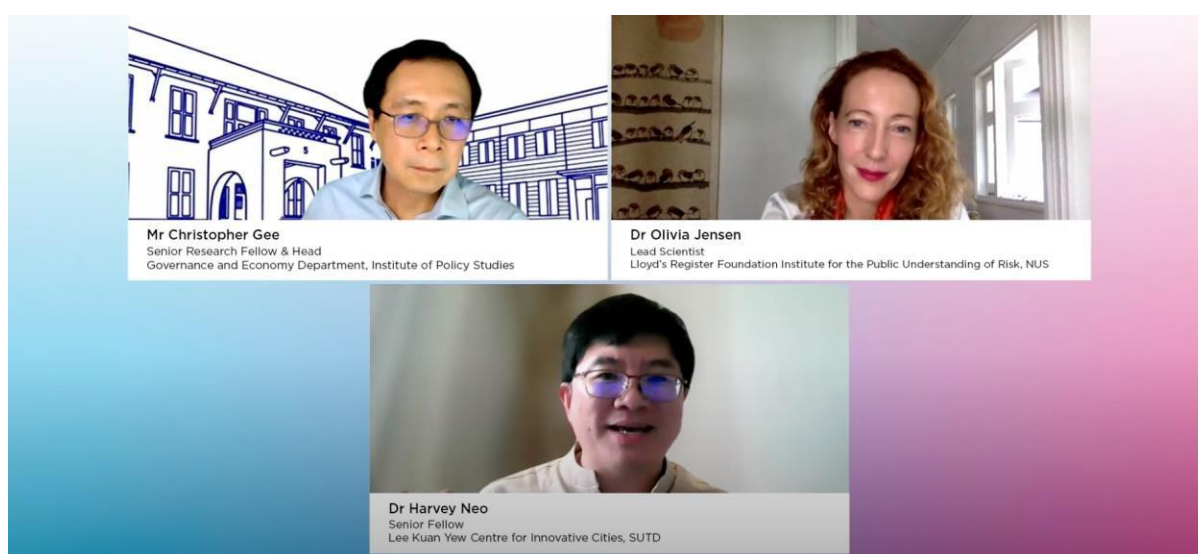


Singapore Perspectives Conference 2022: City Forum 6: City as Green Space

By Yu Yen King

The sixth forum of the Singapore Perspectives Conference 2022 was held virtually and featured Dr Olivia Jensen, Lead Scientist of the Lloyd's Register Foundation Institute for the Public Understanding of Risk at the National University of Singapore, and Dr Harvey Neo, Senior Fellow at the Lee Kuan Yew Centre for Innovative Cities at the Singapore University of Technology and Design. The session was moderated by Mr Christopher Gee, Senior Research Fellow and Head of the Governance and Economy Department at the Institute of Policy Studies. The forum addressed issues around urban environmental policy and the potentials and challenges for Singapore as a city-state in tackling climate change.



Caption for photo: Moderator Mr Christopher Gee opened the session on “City as Green Space”

Opening Remarks by Dr Olivia Jensen

Dr Olivia Jensen started by stating how cities were well positioned to be generators of solutions for environmental sustainability and resilience to climate shocks, given their concentration of skilled people and thriving innovation systems. She observed that the size and density of cities generate economies of scale as well as justifies investment in resilience. However, Dr Jensen noted an important challenge to cities being green spaces locally and regionally — their concentration of population and productive assets amplify the risk from pollution and climate change, while their dependence on their hinterland for scarce resources

and waste disposal can cause unsustainable resource use and biodiversity loss. While cities needed to find ways to share resources and reduce their environmental impact beyond their borders, Dr Jensen said Singapore had the additional challenge of coordinating and cooperating with its neighbouring states to achieve sustainability goals.

Dr Jensen said the greatest achievements in urban environmental policy were related to sound governance and joined-up policymaking. While taking action across sectors is always challenging, Dr Jensen argued that it is much more feasible at the city level. She cited positive examples of inter-sector policy planning and implementation in Singapore, such as the coupling of solid waste management and wastewater treatment to make Tuas Nexus energy self-sufficient, and the coordination between transport policies and green space management in efforts to limit vehicle numbers, improve access to public transport, stimulate zero-carbon mobility and expand park connectors. Dr Jensen suggested that reducing carbon emissions was not and should not be the only policy goal, and raised the question of whether policies that improved public life and economic prosperity could generate co-benefits for the environment.

To set meaningful indicators of environmental sustainability that could be used to identify appropriate policies, Dr Jensen stressed the need to define the boundary of the system carefully and to consider not just the actions and changes happening within the city itself but issues of interconnectivity with its neighbours. For example, Singapore was a top maritime and aviation hub and those sectors were important sources of carbon emissions, so while it might be inappropriate to allocate those emissions entirely to Singapore, Singapore needed to engage in international forums on reducing emissions. She suggested that we might need many indicators at different levels, within the city as well as within the region. Dr Jensen also discussed how there was a lack of information about the relative contributions of different policies and efforts in meeting Singapore's key emissions goals. She shared that communities had signalled their desire to understand how policies fit in with each other and to see that policies were consistent and fair. She expressed her belief that such information would be helpful for interested parties to focus their efforts in contributing to finding solutions, as what was needed for the reduction of carbon emissions was a whole-of-nation effort.

Dr Jensen characterised the possible climate actions that citizens could take in three different spheres: the private sphere where individuals could make consumption choices; the community sphere where one could engage with friends and family about climate change and be part of community groups for environmental causes; and the public sphere where citizens could support policies to reduce carbon emissions by writing to their members of parliament and signing petitions. Dr Jensen was clear on the actions that should be prioritised — the actions in the community and public spheres that would make the most difference.

Dr Jensen cautioned that there could be a caretaker effect in Singapore whereby people did not necessarily see the risks to themselves as individuals and were overly reliant on the government to invest in infrastructure to tackle climate change. She nevertheless was optimistic that people in Singapore were aware of climate change and ready to make commitments or changes in order to support Singapore's climate and environment goals. Dr Jensen noted that there might be anxiety or fear surrounding the impact of transitions, regulations and technological development on individuals. She emphasised the importance of

greater transparency about future policies, expressing her belief that the further in advance people could have information about these new policies, the more different stakeholders such as researchers, civil society organisations and the media could engage with these policy proposals and help people work out what the impact for them would be. As many of the solutions to reducing emissions were not known or invented, Dr Jensen reiterated her view that climate action was a whole-of-nation effort; the more people we engage in the search for solutions, the better.

Opening Remarks by Dr Harvey Neo

Dr Neo's presentation centred around values in Singapore's public policy and how different people would value nature. He began by characterising the main driving imperative of Singapore's policies across sectors as economic development, and suggested that the successful imaging of Singapore as a garden city was driven less by the aesthetics of greenery than by how it could contribute to Singapore's attractiveness as a site of economic investment. He observed that the state's logic of prioritising economic growth has become normalised and part of Singaporeans' vernacular. While it is not objectionable to prioritise economic growth among the various goals a country has to achieve, he noted that we may not be able to determine if certain actions that ostensibly bring about immediate economic growth will inadvertently reduce the potential for economic development in the long run. He explained that many of our actions could have environmental impacts that do not appear immediately or within our lifetime. Nevertheless, Dr Neo remained positive that if Singapore should have a comprehensive nationwide strategy to push for green technology, and the policies are successfully implemented, green policies can drive economic development. Reflecting on the title of the forum, "City as Green Space", he stated that the green space of cities can be seen as sites of intervention to drive the economy. He noted that the city provides us with a think tank or urban laboratory in which we can locate problems and more importantly, suggest solutions to problems.

Dr Neo also considered how different people valued nature, and how those differences play out within policy debates. He posited that the answers to how people valued nature are entangled in irreducible differences in one's ethics and outlook, which are linked to one's socioeconomic class. He said this lack of a common language between people with different views often resulted in those who valued nature for its aesthetics losing out in the discourse about green issues, as their opponents would characterise green issues as highly simplified, even vulgar "development versus conservation" debates. If we do not perceive nature to have intrinsic value beyond its instrumental or economic value, we will not be able to understand why we should engage in pro-environmental behaviours such as recycling, he added. He observed that even if behaviours such as recycling have some benefits to individuals, the pragmatism of Singaporeans may hinder our ability to see these distant benefits that accrue over time, which explains the challenges to inculcating recycling habits in Singapore.

Question & Answer

Mr Gee started the Q&A session by asking the speakers to weigh in on the topic of measurements and standards setting for sustainability performance, and what Singapore's role would be in the process. Dr Jensen said it would be helpful to have a clear idea of what the overarching policy objective was; and that this may be more difficult with a big or

impossible-to-define concept like “sustainability”. It could be easier if we focused on mitigation of climate change, she added, where carbon emissions was the indicator on which all countries set their goals; but therein lies the challenge of breaking down the carbon emissions target into sector-specific goals that can then be easily translated into policy. Reiterating her earlier suggestion of having indicators at various scales and paying attention to how a system’s boundary is defined, Dr Jensen stressed the importance of justifying the selection of indicators in a transparent manner, to prevent scepticism and distrust over whether the indicators are set in terms of what is easiest for the government agency or firm to achieve. She also advocated for organisations to involve external stakeholders in the setting of standards to help build public trust. Dr Neo added that frameworks and standards were necessary for comparing performance, but the challenge was in striking a balance in how detailed the framework should be. He stated that a framework that required too many detailed measurements would discourage usage, that unclear weighting of different factors would run the risk of being insensitive to local contexts, while overly broad or general frameworks would have little utility for comparison. Dr Neo also commented that global frameworks were often promulgated by agencies with significant power or prestige and it might be hard for Singapore to use such indicators.

Building on the speakers’ points on finding the right scale and involving multiple stakeholders to take leadership or ownership for environmental policies, Mr Gee asked the speakers to elaborate on possible actions moving forward. Dr Neo said that having a coalition of people and businesses alongside policymakers would allow policies to have more legitimacy, but expressed his doubt over whether this could be achieved in Singapore. Dr Jensen added that different public, private and civil society organisations have different goals, which makes it difficult to have a clear policy objective or indicator. Citing a successful case study of integrated water resource management in Australia, she suggested that Singapore should have an explicit discussion about values with multiple stakeholders involved. She expressed hope that these discussions will reveal greater common ground between stakeholders than expected, given how surveys have shown that people at all economic levels in Singapore are willing to give up some economic development for a better environment.

The speakers then addressed questions regarding the impacts and perceptions of the actions of public and private actors from Singapore. With regard to a question about Singapore’s strategy to address rising sea levels, Dr Jensen explained how the public perception of risks could affect the support for the government’s response to coastal defence. In response to questions on Singapore’s environmental impact on its neighbours in actions such as importing sand for land reclamation, Dr Neo noted that there were certainly impacts but the costs and benefits have to be understood from the perspectives of multiple actors and politics in Singapore and overseas.

The speakers proceeded to discuss Singapore’s role in the region. Dr Jensen noted that Singapore does act as a hub, where the universities are engaged in conversation and learning with their regional counterparts on environmental challenges. Singapore’s good governance is difficult to implement in other contexts, she added, and Singapore may contribute not only by mobilising its technical experts to help design solutions but also mobilising its policy experts to advise how to achieve the governance that supports inter-sector policy efforts. Dr Jensen also raised the example of how property developers in the greater Jakarta area provided some

public services including sanitation and public transport; it may be helpful for Singapore to engage with the private sector as partners in regional exchange, to accelerate the adoption of climate solutions. Dr Neo acknowledged that Singapore might have an image problem amongst our neighbours, thus it was important to engage them on a one-to-one and equal basis, and foster authentic relationships. He added that setting standards for the region may be an effort best driven by a supranational organisation with high legitimacy and respectability. Dr Jensen commented that Singapore had been engaged in global city networks and performs well in terms of urban environmental comparators, thus it may be easier for Singapore to show leadership amongst cities rather than as a city-state, although she clarified that this may be more about engaging in opportunities for collaboration and learning than trying to impress learning on others.

The audience also asked whether nature conservation and development could be in harmony with each other or if there would always be trade-offs. Dr Neo responded by challenging the concept of nature and suggested that the younger generation may have different ideas of or preferences for experiencing nature, including experiencing nature through artificial environments created by technology or AI. Dr Jensen described how the trade-off between environmental quality and economic development would depend on what stage a country is in terms of economic development. She noted that for high-income, highly developed countries like Singapore with a greater proportion of economic activity in services, it is relatively easier to appear to keep growing while reducing their environmental impact and improving sustainability performance. However, that does not mean that the environmental problems common in low-cost manufacturing industries have gone away; these problems could have shifted to other countries that are at a lower stage of development. Dr Jensen also introduced research that showed how environmental regulation implemented at a sector level could stimulate innovation, and expressed her hope that although transition is going to happen across all areas of the economy, environmental regulation and net economic growth might not be at odds with each other. She highlighted that a big part of the policy challenge was in dealing with the uneven distribution of impacts during such a transition.

When asked whether Singapore should consider more radical policies that might detract from economic growth, given the urgency of the climate crisis, Dr Jensen responded that radical solutions create very high transaction costs. She advised that we do not have to do everything immediately but we should start taking climate action now. She advocated for a higher carbon tax, which can help reveal the costs of reducing emissions and trigger innovation. She remained optimistic that measures to keep the average global temperature increase to below two degree Celsius over an 80-year time horizon will not negatively impact economic growth, given that past examples of environmental regulation such as the regulations around sulphur dioxide have shown how actual costs to firms were lower than estimated.

On the topic of the Singapore Green Plan 2030, there were targets that the speakers felt were ambitious and others which they felt were not sufficient. Dr Neo expressed scepticism about the target to produce 30 per cent of our nutritional needs locally and sustainably by 2030, stating that it seemed beyond possibility. He considered how incentives would help immensely with the “30 by 30” target. There are currently disincentives for local farmers to continue production — most significantly, the uncertainty caused by short land leases and constant lease renewals as well as disruptions caused by farmlands being moved. Dr Neo also

mentioned that he would have liked to see more concrete policies and ideas with regard to protecting our wildlife and to mitigate the increasing human-wildlife encounters in Singapore. Dr Jensen expressed her desire for more ambitious targets on water policy and on emissions reduction, and specifically a target for net zero carbon emissions. She acknowledged that Singapore has a reputation of setting realistic targets and achieving them, which is perhaps why it has not set a target for net zero until it has a clear idea on how to achieve it. She nevertheless expressed her hope to see attendant policies on how Singapore is going to take steps towards net zero and provide a roadmap for the public and businesses.

Mr Gee asked about measures to boost domestic recycling rates in Singapore. Dr Jensen shared that the National Environmental Agency (NEA) tried a range of policies and nudges but this was challenging in Singapore. She noted that much of what went into the recycling bins could not be recycled because they had not been properly sorted or prepared, and the resultant low domestic recycling rates created perceptions that the items in the bin did not get recycled and further discouraged people from recycling. She stated that while NEA has been teaching people to properly sort or prepare items for recycling, the crux of the issue lies in how we expected others to behave and how others expected us to behave. She considered that having people sort and recycle in front of other people might help to create social expectations about recycling, but such a policy would come with other costs and inconveniences.

The session concluded with Dr Jensen reiterating the importance of individuals taking action in the public sphere, with one critical action being supporting the implementation of a higher carbon tax in Singapore, while Dr Harvey encouraged everyone to reduce their meat intake as an easy but critical action that our future selves will thank us for doing now.

Yu Yen King is a Research Assistant at IPS.

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