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SUSTAINABLE CITY DEVELOPMENT IN RUSSIA AND ASEAN: CURRENT INITIATIVES AND POTENTIAL PARTNERSHIP

Abstract. The article is concerned with the current sustainable city projects both in Russia and Association of Southeast Asian Nations (ASEAN), as well as experience the two sides may share in future. Based in the websites of international organizations, Russian and ASEAN companies, as well as materials from mass media, the authors show that both private entities and state actors tend to indicate the environment protection as one of the most pressing topics nowadays; however, the real amount of the work carried out is not enough to make a difference. But, despite that, the situation can be changed for the better. From the practical perspective, this article implies the need to put more efforts and resources into sustainable cities, also presenting ASEAN as a suitable partner for Russia to engage in expertise exchange in the field of the environment to meet the Sustainable Development Goals (SDGs).

Key words: ASEAN, Russia, Sustainable City, Environmental Policy, Cambodia, Myanmar, Philippines, Singapore, Indonesia.

Introduction

The problem of sustainable city networks as a part of environmental policy is rarely encountered in the mainstream humanitarian and political discourse. But underestimating them would be unwise. Cities, if designed towards sustainability, have high potential to prevent and resolve the climate problems and contribute to human prosperity as cities can move quickly to implement locally viable solutions. Cities have their own local contexts (local infrastructure, culture, institutions and knowledge) and provide space to incubate new green technologies as socio-technical experiments can be carried out for clean energy innovation via observing and analyzing the interactions among technologies, users, infrastructure and institutions at city scale. The technology demonstration can shape the frontline for larger green innovation by being replicated and scaled up later [Roggema, A., Roggema, R.:2020, 67].

Cities can also efficiently tackle climate change through city networks by sharing knowledge and encouraging participation in climate action. Unlike national governments, each of

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which have different interests that may conflict, local governments are freer from military, economic, diplomacy and historical issues, which makes it easier to establish transnational city networks for collective climate action. The city network can more proactively respond to climate change by encouraging local governments to submit the ambitious but viable carbon reduction targets aligned with their national governments submitted Intended Nationally Determined Contributions (INDC) to United Nations Framework Convention on Climate Change (UNFCCC).

What is a "sustainable city"?

Despite the large scale of discussions and debates on the environmental issues, there is no generally accepted and clear definition of a "sustainable city". However, the criteria of "sustainability" of a city or a community have been formed by the UN as the SDG 11 Targets[175]. According to them, a community can be considered "sustainable" if it:

A. Provides all its residents with the access to adequate, safe, affordable housing and basic services.

B. Has safe and sustainable transport system which is affordable and accessible for all including those in vulnerable situations, women, children, persons with disabilities and older persons.

D. Has enough resources to protect and safeguard the world's cultural and natural heritage.

E. Has mechanisms to minimize the number of people affected and economic losses caused by natural disasters.

F. Causes minimal impact on the environment.

G. Provides access to safe, inclusive and accessible green public spaces.

H. Has positive economic, social and environmental links with other urban, peri-urban and rural areas.

Situation with sustainable cities in Russia

Russia has no projects of sustainable cities per se. The progress in this sphere confines itself to ecosettlements[176] [177], ecohouses and developments in pre-existing cities[178] [179] [180]. However, back in 2010, Moscow region government announced the construction of Novoye Stupino, a low-rise satellite city located 70 kilometres away from Moscow Ring Road (MKAD) that was to be built on the base of Canadian innovative and energy-saving technologies. It was planned to be the first low-rise satellite city with affordable housing, workplaces and developed infrastructure in Russia capable of accommodating 55.000 people. From 1991 to 2004 Stupino area received 7200 $ of foreign investments per capita, this rate becoming one of the highest in Russia. In addition, several transnational companies, such as "Mars", "Knauf", "FM logistics", "Kimberly Clark", have located

[175] The Global Goals. URL: https://www.globalgoals.org/11-sustainable-cities-and-communities. (accessed:12.09.2021)
[176] Сайт проекта «Эковиль». Режим доступа: http://nevo-ecoville.narod.ru. (дата обращения: 18.09.2021)
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[180] "Implementing ITU-T International Standards to Shape Smart Sustainable Cities: The Case of Moscow". International Telecommunication Union, URL: https://www.itu.int/myitu/-/media/Publications/2018-Publications/TSB-2018/Implementing-ITUT-International-Standards-to-Shape-Smart-Sustainable-Cities-The-Case-of-Moscow.pdf#page18. (accessed:12.09.2021)

their production operations in this area. However, over the last ten years the development of Novoye Stupino has been declining, the infrastructure now being in a lamentable state[181].

Figure 1. Concept visualisation of cottages in Novoye Stupino



Source: https://investtalk.ru/wp-content/uploads/2010/07/New-Stupino.jpg

It seems that Russian authorities have come to understand the importance of the ecological problem not so long ago, as only in recent years have new green projects been introduced. One of them is the federal Clean Air programme, a part of the national "Ecology" project adopted under a Decree from President of the Russian Federation Vladimir Putin in May 2018. The project is expected to lead to a 20-percent reduction on total 2017 harmful emissions in Bratsk, Krasnoyarsk, Lipetsk, Magnitogorsk, Mednogorsk, Nizhny Tagil, Novokuznetsk, Norilsk, Omsk, Chelyabinsk, Cherepovets, and Chita by 2024, as well as a dramatic reduction in air pollution. The Federal Clean Air program will require financing in the order of 500 billion roubles, 381 billion of this coming from non-budgetary sources[182]. Besides, this year Rusnano, the state innovation corporation, has also announced a plan to create a carbon-free zone in the Murmansk region[183] to test renewable technologies and systems which can later be expanded nationwide, including electric transportation and sustainable solid waste disposal, attract investors, create high-tech jobs and improve the local quality of life.

[181] В подмосковном городе Новое Ступино устраняют ошибки застройщика [Real estate developer's mistakes corrected in Moscow region town Novoye Stupino]. Режим доступа: https://regnum.ru/news/society/2628730.html. (дата обращения: 16.09.2021)

[182] Gazprom Neft to invest more than RUB100 billion in the Russian Government's "Clean Air" project. Gazprom Neft, June 7, 2019. URL: https://www.gazprom-neft.com/press-center/news/gazprom-neft-to-invest-more-than-rub100-billion-in-the-russian-government-s-clean-air-project/. (accessed:12.09.2021)

[183] Russia Seeks to Transform Far North Region Into 'Carbon-Free Zone'", the Moscow Times. URL: https://www.themoscowtimes.com/2021/06/07/murmansk-a74135. (accessed:07.09.2021)

Figure 2. Norilsk is one of the dirtiest cities in Russia



Source: https://media.istockphoto.com/photos/smoking-factory-chimneys-in-the-background-of-the-city-picture-id638042064?k=20&m=638042064&s=612x612&w=0&h=Z830uFFCWZ__jYerBWSX_ZYcKlZtpUHVdp4AGeD4Row=

Situation with sustainable cities in ASEAN

According to the United Nations Environment Program (UNEP), the next two decades will see cities become home to 1.1 billion people in Asia alone. Within Asia and the Pacific cities contribute to over 80 per cent of the regions' GDP, this is no small sum[184]. Barring the COVID-19 pandemic, if development and growth within the Asia-Pacific is to continue, cities will continue to play an important role in the economic dynamics of the region and the world.

Table 1

GDP of the largest ESC in ASEAN

	GDP Nominal (USD)	National GDP Nominal	Percentage of National GDP
Jakarta Metropolitan Area	297,720,000,000	1.119 trillion	27%
Bangkok Metropolitan Region	258,900,000,000	543.5 billion	47%
Kuala Lumpur	58,791,970,135	364.7 billion	16%

Back in November 2007, during the meeting within the East Asia Summit, ASEAN environment ministers announced that "ESC" (environmentally sustainable cities) was to become one of the priority areas for regional collaboration. Later, in 2011, ASEAN ESC Model Cities programme was introduced. Back then, only a minority of ASEAN member states had already

[184] UNO Environment Programme. Asia and Pacific. Sustainable cities", UNO Environment Programme, accessed September 13, 2021, https://www.unep.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/sustainable-cities. (accessed:07.09.2021)

created effective national sustainable city frameworks, definitions, indicators, and programmes to encourage bottom-up actions for ESC, while the others lacked capabilities to meet the challenges of sustainable urban development. So, the hope was that more developed cities (so-called Model Cities) would share their experience with their less developed "peers"[185]. And since then, certain progress has been achieved. For example, Malang, Indonesia was a national pioneer in establishing community-based recyclable-recovery centres called "waste banks". This model counteracts a particularly prevalent negative attitude towards waste management, which in developing countries is often looked down upon as dirty and unrespectable [Caprotti F., Yu L.:2018, 30]. Instead, Malang's approach works to replace that reputation with the positive idea of banking, underscoring waste's return on investments.

But in Malang, waste banks go much farther. The best performing of these centres are likely to be profitably and professionally managed, with computerized membership systems. Many also offer additional services, such as medical health insurance for members and employees, public space for community activities, and online payment for a spectrum of utilities and services using cash earned from the sales of recyclables.

Some waste banks also act as community collection points for compostable waste. Others function as training grounds for members – many of them disadvantaged people – to segregate waste materials and transform them into marketable products, thus helping to generate income and jobs. This model has become so successful that it has been endorsed by the national government and is being replicated throughout the country.

Malang's initiative is responding to multiple local needs. But with their myriad functions, waste banks can also be interpreted as contributing to several of the SDGs – for instance, under Goal 11 (on sustainable cities and communities), Goal 12 (on responsible production and consumption) and Goal 14 (on the health of the oceans, as plastic is now a serious threat to global marine health), among others. In Cambodia (Kep and Pursat) and Myanmar (Yangon, Mandalay and Pyin Oo Lwin), city officials are working with businesses and civil society volunteers to step up waste separation at source. They're engaging in campaigns to cut down on litter and single-use plastic bags and promoting sustainable agriculture and small-scale solar systems in schools, parks, and public buildings.

In the Philippines, the government has convened the first national forum to link up previously unconnected green educators – teachers and school principals active in environmental education – with city officials who are working in public health and environmental management departments. This cross-sector forum allows educators and city officials to exchange knowledge and explore collaboration for practical projects in schools and universities – for instance, teachers inviting city officers to give regular talks about sustainable waste management.

Many of these initiatives appear at first to be focused on issues of pollution and the environment. But it's important to recognise that such initiatives have vast crossover effects on other aspects of development, such as health, education and more.

Besides turning ASEAN into one of the main SDG pursuers in the world, these projects attract foreign investment into Southeast Asian countries with China, US, India, Australia and New Zealand being listed as main partners[186].

Nonetheless, not all ASEAN states have to create green infrastructure from the ground up. This is the case of Singapore, the richest city-state in the region with one of the largest GDP per capita in the world[187]. For six decades since Singapore gained its independence the oil refineries on Bukom island (which also functions as a petrochemical plant and tanker fuelling depot) have been a

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[185] ASEAN ESC Model Cities Programme: Lessons Learnt & Way Forward", High Level Seminar on Sustainable Cities, URL: https://www.hls-esc.org/documents/ 4hlsesc/PL1%20-%20AWGESC.pdf (accessed:14.09.2021)

[186] Dr. Do Nam Thang and Shom Teoh, "Asean Environmentally Sustainable Model Cities", East Asian Seas Congress, URL: https://eascongress.pemsea.org/sites/default/files/file_attach/PPT-S3W2-08-DoNamThang.pdf. (accessed:14.09.2021)

[187] Avery Koop, "Mapped: GDP Per Capita Worldwide", Visual Capitalist, July 26, 2021 URL; https://www.visualcapitalist.com/mapped-gdp-per-capita-worldwide/. (accessed:14.09.2021)

mainstay of the city-state's economy, attracting billions in investment and spawning businesses from plastics to rig construction and finance. However, the government decided to move away from the status of the world's biggest refinery and to become a leading regional hub for carbon trading, green finance, consulting and risk management and other services. Given that Singapore cannot cease being a transport hub, repurposing the pre-existing oil infrastructure for hydrogen is considered to be a plausible variant of making the economy greener. Moreover, the Singaporean government and companies have already begun developing grant programmes to support green and sustainability loans and placing funds to catalyze green finance activities out of Singapore[188].

Conclusion

Considering all the recent happenings in the sustainable city development in Russia and ASEAN, it is possible to state that both have large potential for development. Thus, there is a room for joint initiatives and partnership, especially with the most developed countries in the region, such as Singapore. Besides, to be more productive and economically efficient, the future initiatives are ought to be NGO- or private-driven, which means that Russian government needs to undertake several measures aimed at easing of doing business. Singaporean companies, in turn, should start looking at Russia. Moreover, Russian government has a real opportunity to directly contribute to sustainable city development partnership. For instance, in 2018 during the Russia-ASEAN summit President Vladimir Putin said that Russia was already collaborating with Singapore in cyber security, cybercrime prevention, smart city development and strategy formulation on the states' behaviour in global cyberspace[189]. In that regard it is possible to claim that in case Russian makes solving ecological problems one of its priorities, it might as well put its efforts in collaboration with Singapore for the purpose of developing not only smart, but also sustainable cities.

Concerning poorer ASEAN countries, if Russia would have achieved success in creating sustainable cities and communities before they do, it could become an investor in their projects. But this day is still a long way off. On the current stage, only sharing experience is possible.

[188] https://www.businesstimes.com.sg/energy-commodities/singapore-prepares-to-swap-its-oil-hub-status-for-a-greener-future.

[189] Singapore prepares to swap its oil hub status for a greener future", The Business Times, July 20, 2021, URL: https://www.businesstimes.com.sg/energy-commodities/singapore-prepares-to-swap-its-oil-hub-status-for-a-greener-future. (accessed:14.09.2021)

Figure 3. A view of Moscow skyline. Note all the fumes and smog. There is still a lot of room for improvement



Source: Peter Yastrzhembskiy – own work

Figure 4. Singapore downtown. Note how beautifully skyscrapers coexist with vegetation and how clean the air looks



Source: Nigel Li – own work

Figure 5



Source: Nigel Li – own work

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"GREEN" RUSSIAN EXPORT TO ASEAN (2015–2019): MEASURES FOR ITS DEVELOPMENT

Abstract. The competitive advantages of any state represent special distinctive values characteristic of each specific industry, allowing it to operate in market conditions of the economy. At present, the urgency of tasks related to ensuring the sustainable development of the territory, increasing the gross domestic and regional product is significantly increasing. One of the main strategic objectives in the direction of increasing the competitiveness of the Russian economy, the Russian Government highlights the growth of non-primary exports, where there are also commodity groups related to "green" products in its structure. Green goods markets are growing much faster than conventional goods and offer great opportunities for developing and least developed countries. "Green" exports allow countries to simultaneously contribute to economic, social and environmental sustainability. To answer these questions, we use Russian export data to systematically assess current opportunities in ASEAN (for example, organic products, eco-products, green energy products) and future potential (opportunities for synergy and diversification) for

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