

Chapter 9

COVID-19 and the Low-carbon Economy in Malaysia

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This Chapter should be cited as

Govindajaru, VGR,C. (2022), 'COVID-19 and the Low-carbon Economy in Malaysia ' in Anbumozhi, V., K. Kalirajan and X. Yao (eds.), *Assessing the Impacts of COVID-19: Regional Policies and Practices for Green Recovery*. Jakarta: ERIA, pp.169-185.

Chapter 9

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1. Introduction

Structural transformation is indeed important as a post-COVID-19 recovery plan for many of the Asian economies and, more importantly, for Malaysia, which largely depends on its external markets.

Nevertheless, this time around, the transformation is not about sectoral transformation, such as promoting the more productive sectors like manufacturing and moving away from the less productive sectors like agriculture, but more on how to engage in transformation efforts within specific sectors, transform the sectors towards adopting greener practices, and drive the Sustainable Development Goals (SDGs) – that is, transformation in adopting the needed instruments like green technology and green financing. One may ask why this is timely and more important now than before. For Malaysia, this depends on its exporting industries for driving employment and the economy. This has become crucial since the world is moving towards the SDGs and green initiatives. More trade barriers and standards related to the SDGs and the environment are expected due to the aftereffects of COVID-19. Indeed, the social responsibility agenda is back on policymakers' lists given that COVID-19 had taught us how resilient our economy is to such shocks. Issues of poverty, labour discrimination and safety, social safety nets, wages and productivity, healthcare, and housing affordability have become societal challenges. Indeed, by recognising the current challenges and paving its way to more balanced development, Malaysia has already embarked on a journey

to promote inclusive development and a shared prosperity vision.¹ Malaysia needs to catch up on its agenda for sustainability and greener development. Most importantly, progress should be monitored and reported as part of Malaysia's national voluntary review.

The future competitiveness of Malaysia's industrial and service sectors is determined by new norms and standards, that is, greener practices and other measures as well as the achievements of SDGs. This does not only impact the manufacturing sector but also services. For instance, with financial institutions, such as the banking sector, green financing provides new opportunities. Malaysia has already made its footprint in green sukuk financing and should now seize its opportunities as a green financing provider to take advantage of the opportunities that the new norm has put in place. For this, policymakers should find ways to accelerate and provide a post-COVID-19 recovery plan that strengthens green infrastructure investment as well as new growth areas that would otherwise provide Malaysia with the pulse to promote job creation and kickstart the economy in new ways. Indeed, any stimulus package should be used to promote new industries as well as to strengthen the competitiveness of existing industries so that job losses can be minimised, or indeed more decent jobs can be created. In fact, Malaysia's efforts in attracting investments via various incentives launched under the stimulus packages can also be prioritised to attract SDG-focused investments.

¹ Malaysia launched its Shared Prosperity Vision 2030 in October 2019. The current stimulus package, because of COVID-19, is aligned to some of these initiatives.

This chapter discusses the impact of COVID-19 on the Malaysian economy. It further examines the details of the stimulus packages to position Malaysia towards a more sustainable path considering a low-carbon economy as the basis and further provides policy ideas and thinking on how to best position the recovery plans.

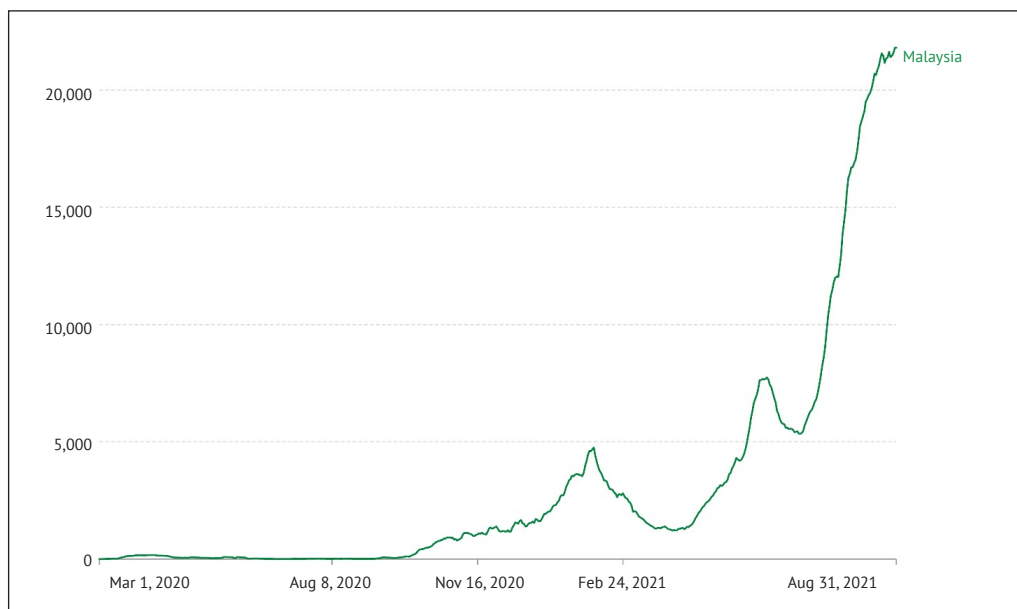
2. The Pandemic and its Impacts

Malaysia has been one of the more successful countries in mitigating the spread of the COVID-19 pandemic at the beginning stage, given that the health response determines not only the health risk of the pandemic but also how soon the economy can take on a recovery mode. As Malaysia is largely driven by a public health system, the response was immediate, and the country was able to handle complex emergencies and advise the public adequately. Whilst this put pressure on the health facilities, Malaysia's quick response with a lockdown prevented the spread of the virus, and within 6 months, the economy was able to operate as usual. The first lockdown, the Movement Control Order (MCO) was announced on 18 March 2020, whilst the Conditional Movement Control Order (CMCO) and the Recovery Movement Control Order (RMCO) were subsequently announced on 4 May 2020 and 10 June 2020, respectively. However, due to the spike in active cases, MCO 2.0 was started on 13 January 2021 and extended further as MCO 3.0 in several states, depending on the COVID-19 condition in each state. Nevertheless, the slow vaccination rate has contributed to spikes in active cases. From mid-June 2021, the four-phase National Recovery Plan was announced. The gradual opening of the economy activities in these phases depends on the

vaccination rate, daily infection cases, and ICU ward operations.

Figure 9.1 shows the new confirmed cases. After peaking at nearly 2,500 active cases in early April 2020, the active cases saw a drastic drop to below 1,500 cases in May and June 2020. The MCO and CMCO were effective in containing the virus spread. Nevertheless, starting September 2020, the cases started to peak again as election activities² sparked the spread of the virus. Indeed, the active cases started to increase again at the beginning of December 2020 until the government imposed MCO 2.0 in January 2021. New confirmed cases were recorded as high as nearly 6,000 cases in February 2021. While some decline was recorded in mid-February 2021, the active confirmed cases started to peak again and recorded above 20,000 cases in August 2021. The current higher rate of vaccination is expected to allow the opening of the economy's sector to cushion economic recovery.

² Due to the political crisis, the 2020 Sabah state snap election was held on 26 September 2020, with the outcome of 73 members of the 16th Sabah State Legislative Assembly elected.

Figure 9.1 Daily New Confirmed COVID-19 Cases

Note: Based on the rolling 7-day average; the number of confirmed cases may be lower than the actual cases due to limited testing.

Source: Our World in Data and Johns Hopkins University CSSE COVID-19. <https://ourworldindata.org/covid-cases?country=~MYS#confirmed-cases> (accessed 1 September 2021).

2.1. Economic impact

Malaysia recorded its lowest economic growth in Q1 2020 at 0.73%, and because of the complete lockdown that started on 18 March 2020³ (and ended on 9 June), Q2 growth contracted by nearly 17% (Figure 9.2) in 2020. Q3 and Q4 growth was -2.6 and -3.4%, respectively. Overall, Malaysia's gross domestic product (GDP) declined by 5.6% in 2020. Manufacturing sector is key for Malaysia's development especially in contributing to exports and employment. Tracking the industrial production index (IPI) progress indicates that

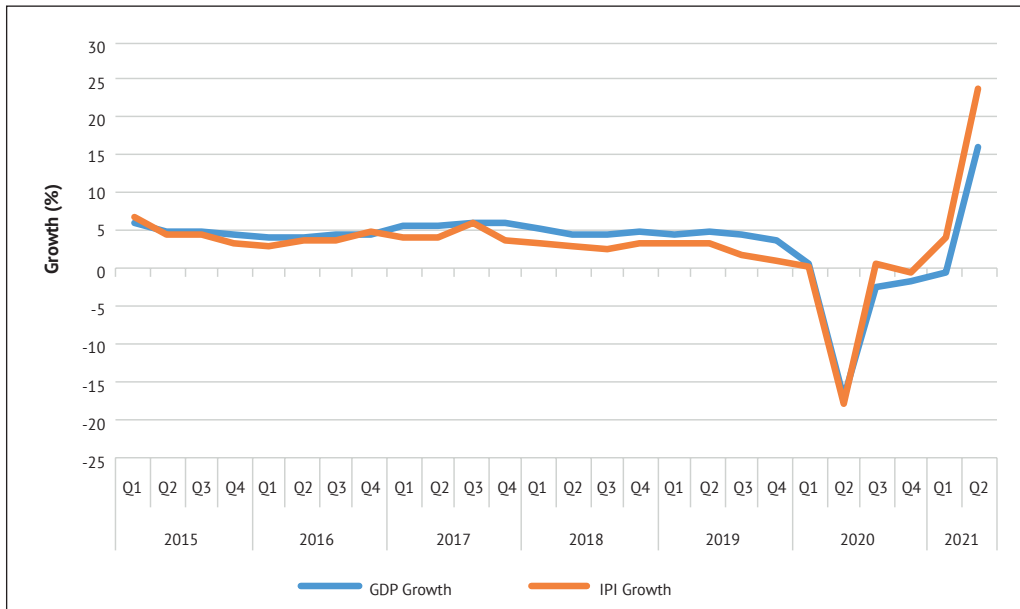
manufacturing production rebounded after Q2 2020, recording positive growth in Q3, 2020 as well as in Q1 and Q2 of 2021, hence, showing signs of recovery, albeit slowly (Figure 9.2). This is mainly due to the global recovery, with exports and manufacturing sectors contributing to the positive economic growth. Sectoral-wise, in Q2, 2020, the most significantly impacted sectors were construction (44.5%), mining (20%), manufacturing (18.3%), and services (16.2%), as shown in Figure 9.3. The agricultural sector showed growth of 0.99% and, given the adoption of technology in terms of the delivery system and e-hailing transportation system in the food sector, it managed to cushion the agriculture supply system, and the sectors were able to minimise the impact on them to some extent. In Q3, 2020, all the sectors showed negative

³ Malaysia has officially propagated the Movement Control Order under the Prevention and Control of Infectious Diseases Act 1988 and the Police Act 1967.

growth, except the manufacturing sector (which recorded growth of 3.3%). Similarly, within services, the two most important sectors that contribute to CO₂ emissions are electricity (energy) and transportation, which contracted 13.27% and 44.77%, respectively, in Q2 2020 due to the lockdown. Whilst the revival of the economy after the

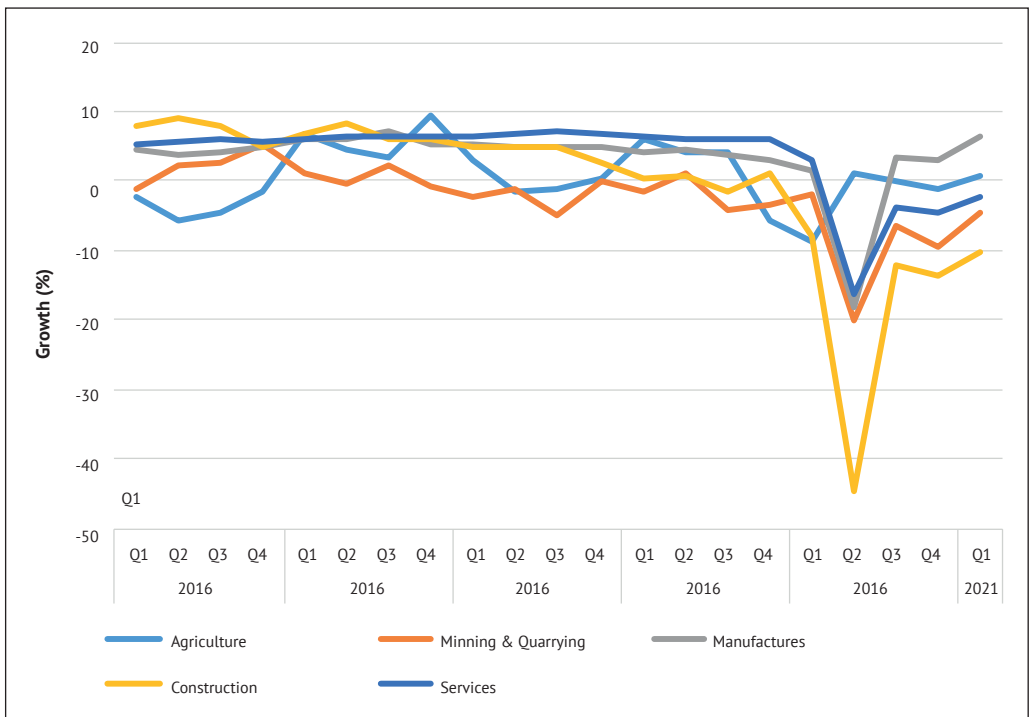
lockdown has seen an increase in energy demand, the same is not happening in the transportation sector. The implications of COVID-19 on tourism and other related sectors have limited the revival of the transportation sector. Along with that, the environmental implications are minimised.

Figure 9.2 Growth in GDP and the Industrial Production Index



GDP = gross domestic product, IPI = Industrial Production Index (growth).
 Note: GDP growth is based on 2015 constant prices.
 Source: Author’s calculations based on data from the Department of Statistics of Malaysia.

Figure 9.3 Sectoral Impact of the Pandemic

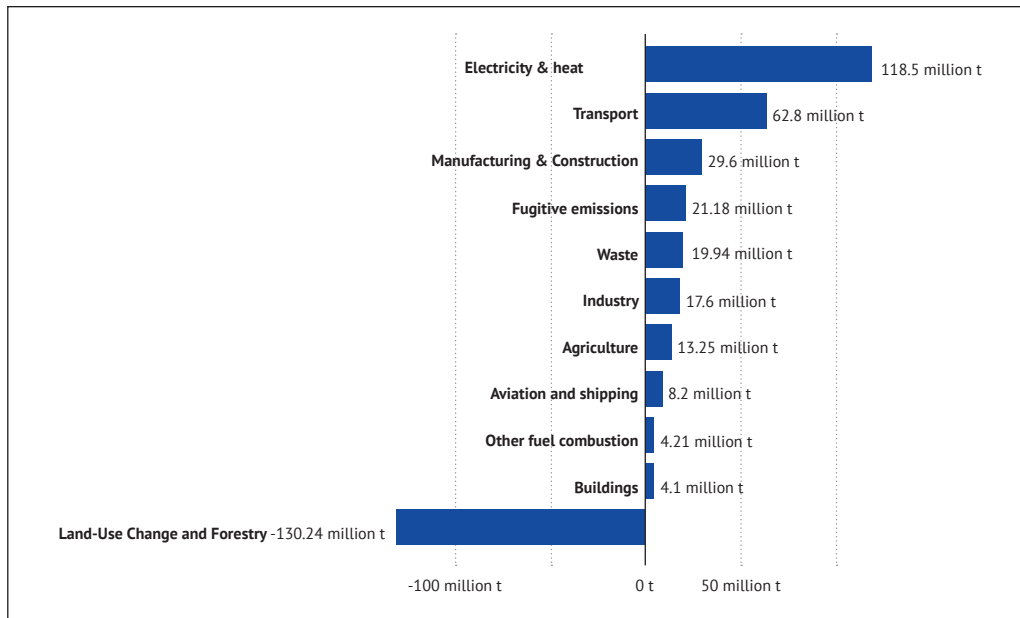


Note: Growth is based on the year-to-year growth rate.
 Source: Author's calculations based on data from the Department of Statistics of Malaysia. <https://www.bnm.gov.my/-/monthly-highlights-and-statistics-in-june-2021> (accessed 27 August 2021).

2.2. Impact on environment and low-carbon and green growth

Malaysia's source of greenhouse gas emissions is mainly from three sectors, energy, transportation, and manufacturing and construction, contributing 118.5, 62.8, and 29.6 million tonnes of CO₂ equivalent, respectively. Malaysia's commitment to reducing carbon footprints and taking a new growth path involves strategising

its future plans, including its stimulus packages towards these sectors and industries. Indeed, given the current emphasis on SDGs and green standards and requirements, Malaysia needs to prepare its industrial sectors to embrace green and low-carbon strategies. International marketing competitiveness will be severely impacted if Malaysia chooses not to align its current initiatives towards these new challenges and the new global norms.

Figure 9.4 Greenhouse Gas Emissions by Sector in Malaysia, 2016

Note: Greenhouse gas emissions are measured in tonnes of carbon dioxide-equivalent.

Source: CAIT Climate Data Explorer via Climate Watch and Our World in Data. Available at <https://ourworldindata.org/emissions-by-sector>

The COVID-19 pandemic has sent a strong message that it is possible for countries to pursue a more sustainable path, and the impact is immediate if society, industry, and the government work closely to accelerate the aim of reaching the SDGs and green growth targets. During the lockdown (March–June 2020), various environmental indicators in Malaysia show a significant contraction. The Air Pollutant Index went down by 14%, reaching the clean index status. Sulphur dioxide (SO₂) and particles below 2.5 microns (PM_{2.5}) went down by 27% and 29%, respectively. Similarly, carbon monoxide (CO) and nitrogen dioxide (NO₂) levels dipped by 49% and 70%, respectively. In addition, total volatile organic compound readings were at normal or below alert levels at 1 part per million. Figure 9.5 shows significant changes in the emission levels across industrial, urban, suburban, and rural areas. In general, the comparison shows a notable decrease in particles

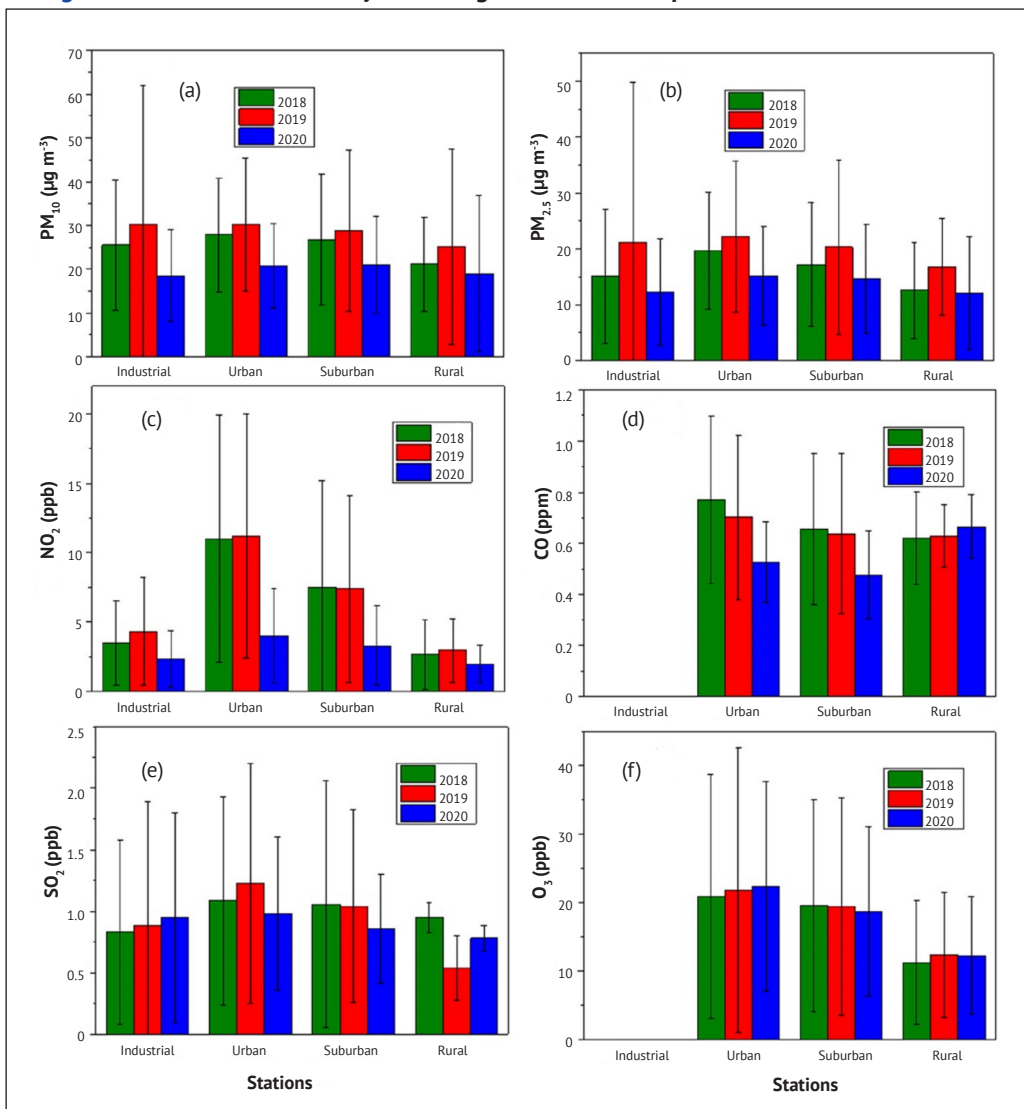
below 10 microns (PM₁₀), PM_{2.5}, and NO₂ concentrations at the industrial and urban sites during the MCO period. It indicates that if industry and society at these levels can make the transition to a more productive green transition by adopting technology and adjusting the ways in which society consumes, works and moves, a significant impact on the environment can be made.

However, the opening of the economy will increase emission levels back to the levels that they were previously or even higher if the government only aims at recovery and post-pandemic plans for the revival of the economy without thinking further of moving the economy towards a greener growth path. In Malaysia, the opportunity exists to place the recovery path on a greener path since the government in the past had put forward numerous regulatory frameworks,

targets, plans, and specific programmes, such as the Green Technology Master Plan (2017–2030), National Renewable Energy Policy, Shared Prosperity Vision 2030, and others. However, one limitation that the government may face is the fiscal constraint that the pandemic had put on the government budget. This is in addition to the declining oil price that had put a deep hole

in the government’s revenue and that consequently allowed Malaysia to explore other sources of income via resource extraction industries, such as mining and forestry. Indeed, in a larger context, due to managing the debt-to-GDP ratio, the government may have no choice but to use the existing resource-based industries and focus on new growth areas that require time to build.

Figure 9.5 Emissions in Malaysia During 18 March–30 April in 2018, 2019, and 2020



Note: The emissions shown are particulate Matter less than 10 µm (PM10); particulate matter less than 2.5 µm (PM2.5); nitrogen dioxide (NO₂) parts per billion; carbon monoxide (CO) parts per billion; sulphur dioxide (SO₂) parts per billion; and ozone (O₃) parts per billion.
Source: Kanniah et al (2020).

3. Stimulus, Recovery Plan, and the Low-carbon Economy

Given the adverse impact of the pandemic, the Malaysian government has launched a series of stimulus packages to, first, mitigate the immediate effects of the pandemic and, second, to recover the economy. On 27 February 2020, the government launched the first economic stimulus package worth RM20 billion, and on 27 March 2020, the government announced the second stimulus package to further broaden the economic stimulus package to benefit industry and the people further. The second stimulus package amounted to RM230 billion (excluding the first package of RM20 billion). The RM230 billion stimulus package focuses on people (126 billion), SMEs (101 billion), and economic revival (3 billion). The RM250 stimulus package accounts for 17% of the GDP. The actual fiscal spending of the government for both the stimulus package amounts to RM25 billion, of which 3.5 billion was for the first economic stimulus package, given that many other packages are in the form of tax relief, loan deferment, and other forms of incentives and supports. Additionally, the SME stimulus package, amounting to RM10 billion, was announced on 6 April 2020, specifically to aid the ailing industrial and service sectors. On 23 September 2020, an additional RM10 billion Prihatin Supplementary Initiative Package was launched.

The stimulus package aimed at assisting society, especially the poor and the middle income (RM7 billion), and providing wage subsidies (RM2.4 billion) and a Special Grant (RM600 million) for SMEs. In total, the stimulus package, amounting to RM305 billion, was the largest compared to the stimulus packages provided during the Asian financial crisis and global financial crisis combined⁴ Additionally, in 2021, two new stimulus packages were announced amounting to RM35 billion and focusing on the economy recovery plans, including reducing the burden on society. In June 2021, the National People's Well-Being and Economic Recovery Package (PEMULIH) valued at RM150 billion was announced.

Table 9.1 provides the nature of the allocation and programmes within specific stimulus packages. In the first stimulus package, the government mainly aimed at three strategies, which were catalysing society, centralising economic growth, and accelerating quality investments to mitigate the COVID-19 impacts. In accelerating investment, the target was also to accelerate the existing plans for the green growth path, such as by opening a quota bid of 1,400 MW for solar power generation, implementing up to RM3 billion on works related to the National Fiberisation and Connectivity Plan, and accelerating projects such as LED street lights, transmission lines and rooftop solar installations, and the SME Automation & Digitalization Facility. Some of these initiatives will have a positive impact on sustainability.

⁴ In 1998, to mitigate the effects of the Asian financial crisis, the government rolled out RM7 billion in stimulus measures, and during the global financial crisis, the government injected two stimulus packages in 2009 and 2010, amounting to RM67 billion and RM60 billion, respectively.

Subsequently, the second stimulus package focuses on the people, businesses (specifically SMEs), and the economy in a larger context. The people-centric budget aligns well with some of the SDG goals since the immediate concern is with the most vulnerable groups, known as the B40. Efforts are also being made to reclassify the poverty line and to prepare the labour force for the new labour market. However, the recovery stimulus at present has yet to be aligned to address the environment and green economy, specifically with regards to accelerating technology adoption and changing the landscape of the energy and transportation sectors (the main contributing sectors). How well is the recovery plan aligned to move the economy towards a new path, specifically towards a low-carbon economy and, to a larger context, sustainable development? The stimulus package is a short-sighted one whereby it only allows a response to the immediate impact on society. Indeed, the recovery plan supporting SMEs is none other than one supporting the survivability of the existing businesses and not of creating new growth areas or even industries. Fiscal constraint may not allow Malaysia to announce additional packages, and the political uncertainty may encourage politicians to focus on the immediate needs of society and business as a response in preparation for elections.⁵ However, unpacking past stimulus packages has revealed that new thinking and opportunities were not incorporated into the stimulus

packages that Malaysia designed so that the country could position its competitiveness and seize new opportunities, especially in driving new growth areas. The aim of the packages was more towards mitigating the impact and recovering the existing businesses and the economy to their pre-pandemic states. A greater focus on people could also be added, given that the more vulnerable are more greatly impacted by COVID-19 than others. It is also true that political instability has led the newly formed government to focus on packages that would not otherwise be considered.

The creation of these so-called new industries or the transformation of existing ones into greener industries would provide a huge opportunity for Malaysia. This includes commodity-based industries, e.g. the palm oil industry, which faces obstacles in exporting its commodities and sustaining its value-added contribution. Green infrastructure like green technology and green financing would be instrumental for these industries to venture into new markets and markets that now demand new standards. Malaysia does not have any direct stimulus package that directly supports a low-carbon economy; however, some of its stimulus support would have indirect implications on green development. For instance, the efforts of digitalisation would allow firms to save resources and be more efficient in delivery and other forms of activities.

⁵ Again, some of the European Union countries focus their stimulus packages on targeting green initiatives due to the pressure that they receive from environmentalist groups. For instance, Macron has made green recovery a priority since his ruling party suffered losses to environmentalists in municipal elections this year.

Table 9.1 Composition of the Stimulus Packages

Packages	Focus	Amount (RM billion)
First and Second Stimulus Packages	<p>People: Medical equipment; assistance to students; Employee Provident Fund (EPF) withdrawal; loan moratorium; house rental exemption; electricity discounts; free internet; insurance premium suspension; income replacements; wage subsidy; special allowance to front-liners; one-off cash payments (households and individuals); assistance to vulnerable groups.</p> <p>Supporting business: Guarantee scheme; micro credit scheme; facility for all economic sectors; loans; increasing the cashflow of employer advisory services, exemption of levy, postponement of income tax payments, and loan moratoriums.</p> <p>Economy: small projects and infrastructure development.</p>	250
SME Aid (Additional Package)	Wage subsidy; special grant; rental discounts; micro credit; foreign worker levy reduction; moratorium.	10
Short-term Recovery Plan	<p>People: Wage subsidy; hiring and training assistance for businesses; reskilling and upskilling; gig economy social protection and skilling; flexible work arrangement incentives; child care subsidy; public transport subsidy; healthcare support; internet connectivity for education and productivity; social assistance support for vulnerable groups.</p> <p>Business: Micro and SMEs E-commerce Campaign; 'Shop Malaysia Online' for online consumption; technical and digital adoption for small and medium-sized enterprises (SMEs) and mid-tier companies (MTCs); MyAssist Micro, Small, and Medium Enterprise (MSME) One Stop Shop; SME financing; tourism financing; microfinancing bumiputera relief financing; SME Go-scheme for Liquidity Support; accelerated payment terms for government-linked companies (GLCs) and large corporates' supply chain; tax relief for COVID-19-related expenses; financial stress support for businesses; social enterprise elevation; spur set-up of new businesses.</p> <p>Economy: Dana Penjana Nasional; technology innovation sandbox; digitalisation of government service delivery; national 'Buy Malaysia' campaign; ePenjana credits in e-wallet; incentives for the property sector; tax incentives for the purchase of passenger cars; extended service hours in the new normal; Malaysia as an attractive horizon for businesses; tourism sector support; arts, culture, entertainment, events, and exhibitions sector support; agriculture and food sector support; commodity sector support; proposed COVID-19 Temporary Measures Act; Sukuk Prihatin.</p>	35
Prihatin Supplementary Initiative Package	<p>People: B40 and M40 and wage subsidy.</p> <p>Economy: SME grants.</p>	10
Permai Assistance Package	Tax relief; wage subsidy; cash handouts; sales tax exemptions; loan moratorium extensions	15
Pemerksa	Control of COVID-19 (immunisation, healthcare); economy recovery (small projects, grants, micro credit, employment); strengthening competitiveness (business environment; investment and export markets; automation and digitalisation; sustainable development); inclusiveness (wage loss programme, living costs, youth and women programmes); economic transformation.	20
Pemulihan Aid Package	Business support; food baskets; cash handouts; micro credits; subsidies; healthcare.	150

Source: Compiled by author from stimulus package speeches by the prime ministers, available at <https://www.pmo.gov.my> (accessed 1 September 2021).

Similarly, some of its stimulus packages are counterproductive for the development of green infrastructure and the low-carbon growth path. For instance, the postponement of electricity payments and, later, the electricity subsidisation programme by the national energy producer would have had a counterproductive effect. Although overall demand⁶ contracted by 28% in May 2020 (compared to May 2019), the electricity usage in the residential sector surged between 20% and 50% during the MCO. TNB, the national energy producer, has allocated RM10 million to the Ministry of Health and another RM17.5 million to the state government to secure essential medical supplies and protective equipment and to address the most pressing needs in the early stages of the MCO. TNB further allocated RM150 million to fund the tiered electricity discounts of between 2% and 50% from April to September 2020, and this was announced as part of the government's PRIHATIN stimulus package as well as in other stimulus packages. To further cushion the impact of COVID-19 on society, TNB has offered a six-month instalment plan to all its 7.5 million customers, a surcharge waiver on late payments, and an extension of supply disconnection suspension.⁷ Whilst the immediate response of the TNB is to provide support to the government in cushioning the immediate effect on society, it may also have adverse negative effects on its strategy to move to a greener path. Delays in the

implementation of renewable energy initiatives and profiles by TNB could be expected, given that its profits are affected.⁸ In addition, tax incentives for passenger car purchases, tourism sector support, incentives for new start-ups, and other business support could also be aligned for the purpose of sustainable consumption and production, leading towards a greener growth path. This requires systemic thinking as to how those industries can be aligned.

4. Designing a Post-crisis Strategy: Building Greener Stimulus Recovery

Malaysia needs to look forward in more strategic ways and tap the new opportunities for economic resilience and inclusivity in the near future. As such, Malaysia needs to align its future recovery plans in low-carbon investments, climate change, and SDGs as the key features in any policy design. Indeed, lessons from the Asian financial crisis show that the banking sector weaknesses have had wider economic implications for all sectors. Similarly, COVID-19 seems to change the global order and standards towards a sustainable path, and it would be wise to prepare Malaysian industries and the public to embrace this new norm. The way forward for future strategy is to align consumption, production, and future industry to embrace sustainability as well as create future green industries. Revisiting the existing initiatives that lead to a low-carbon economy

⁶ Electricity in commercial and industrial sectors dropped between 25% and 50%.

⁷ Referring to a TNB press release, TNB was affected by the volatile foreign exchange in Q1 2020 and is preparing for prolonged challenges post COVID-19 (https://www.tnb.com.my/assets/quarterly_results/Press_Statement_1QFY20.pdf).

⁸ Tenaga Nasional Berhad's group profit after tax declined by 51.6% to RM736.7 million in Q1 2020 due to foreign exchange losses given the global uncertainty.

and complementing them with the recovery plans would be a smart strategy. Table 9.2 shows how those strategies can be operationalised and deployed. Malaysia's current strategy involves six stages – resolve, resilience, restart, recover, revitalise, and reform – which were embarked upon to deal with the unprecedented health, economic, and social impacts. With the announcement of the various stimulus packages, Malaysia has moved into Phase 2 for restart and recovery. Nevertheless, for any future restart and recovery initiatives, the plans could have aligned a sustainable path. Critically, the phase to revitalise and reform should clearly focus on sustainability and low-carbon reforms, which are crucial given the new global order.

For instance, stimulus focusing on people could evolve from just reducing the burden of the people during the pandemic towards creating new employment opportunities in new growth areas related to low-carbon industries. Indeed, it is timely that the consumer focus stimulus packages are aligned with the Malaysia initiative for a greener path. The idea is to promote the consumption of green products and services. Aid and subsidies given to the most vulnerable groups can be targeted at purchasing green products and services. The strategy is to create demand for such products and services so that industry will be driven to make their production greener.

As for the business focus, for instance, Malaysia has already embarked on registering companies

providing green products and services via the MyHijau scheme. In this regard, the scheme can be used to further link customers and firms to engage in sustainable consumption and production. Indeed, it is best to view the investments in the post-recovery as a complement to the future sustainability policy. For instance, Malaysian Investment Development Authority (MIDA) investment efforts could further focus on building the competitiveness of green industries. As of July 2020, MIDA has attracted RM35.9 billion in investments, of which 69.3% of the approved investments in the manufacturing sector were new greenfield investments. Given that MIDA has already established its green investment strategies, the green sectors can be further focused on. The focus could be placed on providing incentives and tax breaks for sustainability. For instance, the incentive for the property sector could be well-aligned to green and sustainable practices. Similarly, as illustrated in Table 9.2, technology innovation, financing, efforts for digitalisation, and regional cooperation can all be aligned to achieve more sustainable growth.

5. The Way Forward: Game-changing Plans

Integrating a low-carbon agenda with stimulus investments is one way for Malaysia to make low-carbon economy commitments. Given that Malaysia already has had a strong policy framework with institutional capacity and a legal mandate, making this transformation will prove to be less hurdled compared with countries without such a regulatory framework. However, the challenge is to make this smart policy transition, which requires close coordination within various agencies and smart policymakers.

Table 9.2 Emergency, Exit, and Post-pandemic Strategies and Low-carbon Growth

Areas of recovery	Phase 1 (Emergency)	Phase 2 (Exit)	Phase 3 (Low-carbon growth)
	Resolve and resilience (health and people)	Restart and recover (people, business, and the economy)	Revitalise and reform (new sectors, new growth, new employment generation)
Electricity	Subsidy to society (reducing burden due to job losses)	-	Aid for green practices; renewable energy; green infrastructure, registered green products, and services
Transportation	Travel subsidy	Tourism incentives; tax reductions for car purchases	Public transport subsidy; investment in green transportation; incentives for green transportation; tax exemption for green vehicles
Building	-	Incentives for the property sector	Incentives for the property sector with sustainable concepts; green building initiatives
Fuel	Subsidised public transportation	-	Reduce fuel dependency; alternative energy; improved public transportation, incentives for public transportation
Industry	Wage subsidy (sustain employment)	Buy Malaysia campaign; wage subsidy; reskilling and upskilling; micro credit funds; SME Go scheme for liquidity support	Green tax exemption; investment allowances; R&D incentives; industry incentives for flexible work arrangements (work from home); promotion of green jobs; promote green purchases, wage subsidies for green jobs
Technology Innovation	New start-ups	Technology innovation sandbox	Promote Industry 4.0 technologies; stream R&D budget to green research areas; promote IPR related to green technologies; subsidise knowledge and technical production in low-carbon fields; green start-ups
Digitalisation	Incentives for digital adoption, internet allowances, and aid	Micro and SMEs E-commerce; technical and digital adoption for SMEs; connectivity; digitalisation of government service delivery	Funds and aids can be linked to green and sustainable goals
Finance	Moratorium; micro credit scheme; loan facilities and guarantee schemes	Payment terms for GLCs and large corporates' supply chain	Promote the green sukuk market; place financial institutions to offer green financing; green supply chain financing; micro credit to green practices
Regional cooperation	Relaxation of import regulations for medical devices and equipment; exemptions of import duties	Investment opportunities; market identification; resource mobilisation	Relaxation of import regulations; eliminate non-tariff measures; tariffs, regulatory constraints in green technologies; incentives for R&D collaboration, technology transfer; trade policy for green industry; digital platform

Note: The examples are not mutually exclusive in nature. Policymakers could further add initiatives by tying in their existing plans and programmes to develop the low-carbon path.

Source: Author.

Prioritising a green path requires policymakers to focus on the long-term implications that can be best assessed by asking the following questions:

1. How would intervention support long-term decarbonisation targets and strategies?
2. Does intervention provide and improve the financial market landscape for decarbonisation?
3. Does intervention allow the experimentation of low-carbon technologies?
4. Does intervention support and promote a transition towards green infrastructure?
5. Do intervention support knowledge and technical capabilities in low-carbon fields?

A game-changing plan always requires an effective institutional setting given that market failure is rampant. It requires investment in new growth areas and needs the government to reduce the risk and uncertainty exposures in those areas. Malaysia can do this using different approaches, such as using public financing or its GLCs, or through public-private partnerships, including via international collaboration.

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