Nor Shamsiah Mohd Yunus: Keynote address - Regional Conference on Climate Change

Keynote address by Ms Nor Shamsiah Mohd Yunus, Governor of the Central Bank of Malaysia (Bank Negara Malaysia), at the Regional Conference on Climate Change, Kuala Lumpur, 25 September 2019.

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It is my pleasure to welcome you to today's Regional Conference on Climate Change. The recent shroud of haze in Malaysia and neighbouring countries is a timely reminder of the environmental challenges confronting our generation and the generations to follow. With the passing of time, these challenges have become more pressing, and their consequences more dire. Yet, our response – at the industry, national and global level – is only just beginning to catch up to the enormous task we face. As described by the former UN Secretary-General, "*we are the last generation that can take steps to avoid the worst impacts of climate change*".

Climate change does not just threaten polar bears in the Arctic. It also threatens our socio-economic prosperity here in Southeast Asia. It poses risks to the fiscal position of governments, the viability of businesses and the living standards of individuals. As such, the effects of climate change are not merely an ecological problem for scientists and conservationists to worry about. It presents a major economic issue with direct implications on financial stability. It is for this reason that Bank Negara Malaysia, along with many other central banks around the globe, are giving serious attention to climate risk. In my remarks today, I will outline:

- Why climate change matters for the economy and for financial institutions, and;
- How we can and must work towards building climate resilience.

Why climate change matters for the economy and financial institutions

The financial sector is an important enabler of economic growth. The ability of financial institutions and authorities to identify and manage risks that can impair financial intermediation has direct consequences on the performance of the financial sector and the economy. These risks impact those we invest in, lend to, promise to cover and strive to create wealth with. Climate change impacts all of them, in increasingly significant and lasting ways.

As we have seen in recent years, climate change is causing greater **volatility in weather patterns**. Globally, overall economic losses arising from natural disasters have been on an increasing trend for the past 40 years. In 2018, such losses amounted to USD160 billion – half the size of Malaysia's economy, and among the costliest disaster year on record. Last year, Asia was the continent most affected by geophysical events, where typhoons, earthquakes, landslides and flash floods accounted for 43% of all events worldwide and for 74% of fatalities. While storms and droughts have long been familiar to this region, they have become more intense, more prolonged and more frequent. This translates into greater economic loss for governments, businesses and households – which in turn, can make its way into the financial system. Evidence of these effects can clearly be seen from recent events:

- The Thai floods in 2011 cost USD45 billion in damages and affected 240,000 small businesses. Carmakers in Malaysia, Japan and the US had to slow down production due to the interrupted supply of parts from Thai factories. Prolonged supply chain disruptions, which took months to recover, had direct financial and economic implications – Thai exports fell, its budget deficit widened and the economy shrank by around 2%. The total cost to the Thai economy was much higher if we account for the cost of repairs, rebuilding and mitigation measures to prevent a repeat of the disaster.

- Closer to home, the floods that hit Kelantan and Terengganu in 2014 were among Malaysia's worst ever. More than 200,000 people were affected and displaced. Businesses and financial institutions had to temporarily shut their operations. Economic activities and financial intermediation were disrupted. The Government spent over RM2 billion to rebuild basic infrastructure, such as roads and schools. The average cost to individual households was estimated to be more than two years of income for their breadwinners. In 2017, massive floods in Penang and Kedah saw similar effects. Banks also bore the costs of moratoriums on loan repayments that were provided to those affected by such disasters. As climate-related events intensify, these costs will escalate.

- As a result of the severe and prolonged El Niño drought in 2016, the agriculture sector in Malaysia shrank by 5.2%. Last year, adverse weather (and production constraints) dented yields yet again, causing the sector to contract by up to 2.5% in the second quarter. This is not an isolated problem for the agriculture industry. These shocks can also jeopardise domestic food production and cause prices to inflate. For instance, the irregular weather and prolonged haze conditions in 2015 caused the prices of fresh vegetables to rise by 7.7%.

Climate change can also affect the economy **structurally and gradually**. We know that the earth is warming.

- The global average temperature has been increasing by 0.1 degrees Celsius each year since 1950. What we may not realise is that our cities are becoming hotter even more quickly. Some cities, despite efforts to maintain green lungs, are heating up twice as fast – as the relentless construction of high-rise steel, glass and concrete buildings work in tandem with asphalt roads to trap heat in the city.

- Global warming is not just a problem on dry land. Warmer oceans affect the food chain for marine life and aggravate the already declining supply of fishery resources. This in turn affects the fishing industry and the livelihood of fishermen.

- Warming oceans also mean melting ice caps, raising sea levels. One in three people in Southeast Asia live in low-elevation coastal zones. Alarmingly, since 1993, the Straits of Malacca has risen by the width of an iPhone 5. If this rise doubles, we may see 15 metres of shoreline erosion, which will displace many coastal populations and businesses. Additionally, coastal erosion will directly impact tourism in places such as Kota Kinabalu and manufacturing in industrial zones such as Kota Bharu, Kuala Terengganu and Mersing. If this trend continues, our mangroves would completely sink by 2040 and industrial zones will be affected by 2060. Our ports, the lifeblood of international trade linkages, will also struggle to cope with rising sea levels. A recent study estimates that pre-emptively adapting *Port Klang* and *Tanjung Pelepas* for climatic conditions expected in 2070 will cost nearly RM3 billion. Naturally, this cost would be far greater if not planned for in advance.

The effects of climate change are real. They are already upon us; and make no mistake, they will intensify. For this reason, financial institutions can no longer be passive about climate change and its effects. There is a clear economic case for building resilience to climate change: it directly affects our balance sheets, and can pose a broader risk to financial stability from significant and prolonged climate-related events.

So far, I have explained the direct, physical risk posed by climate change to the economy and financial industry. However, it is not only the climate that is changing. The changing behaviours of economic agents also give rise to significant transitioning risks. As the world becomes increasingly concerned with reducing the global carbon footprint, governments, businesses and consumers are pushing for a **transition to a more sustainable, greener economy**. As this happens, some sectors of the economy may face declining demand, big shifts in asset values or higher costs of doing business. For instance, governments' actions to enforce the Paris

Agreement could see the vast majority of the world's proven fossil fuel reserves left in the ground. This has implications on the value of investments in energy companies, particularly those dealing with oil, gas and coal.

For many emerging market economies, the transition towards sustainability also invites policy conflicts. For example, national goals for reducing fossil fuel use may entail significant trade-offs with growth and poverty reduction objectives, at least in the short- to medium-term. These challenges are further intensified by broader environmental, social and governance (ESG) considerations. Achieving sustainable growth and development amidst capacity and funding constraints can present significant challenges for political leadership, economic priorities and social outcomes. Under these circumstances, the higher cost of transition is likely to mean that a longer time is needed for the transition towards more sustainable growth policies, while keeping in mind that this may be at the expense of heightened physical risks as a result of delayed action. This remains a difficult balance that requires careful and well-informed assessments, policy coordination, planning and communication.

A very real example, close to home, is palm oil. As we all know, many in the global community have expressed concerns about the environmental impact of the palm oil industry, which accounts for 7% of Malaysia's gross exports. Regardless of whether these concerns are justified, the fact remains that the industry is faced with significant transition risks. The government and industry's response to these risks will ultimately determine the resulting economic impact on firms in the industry, their counterparties and the economy more broadly. Inevitably, some adjustments will need to be made. Already, the industry is working towards the end-2019 deadline for certification of Malaysian Sustainable Palm Oil (MSPO) compliance. But the stark reality is that these adjustments will not come easily, especially for smallholders. In this regard, I would like to applaud the effort made by several banks to educate and assist borrowers in the palm oil industry in their journey to obtain MSPO certification. Such efforts are crucial to ensure that the transition is orderly and can be sustained.

How we can work towards building climate resilience

Having established – I hope – a clear case for action, let me now address how we can work towards building climate resilience together. The Bank has identified several key priorities.

First, we have to develop the tools and capacity for **identifying climate risks** relevant to financial business. Climate change science is complex and multivariate. Getting to grips with issues such as weather patterns, groundwater management and sustainable palm oil go well beyond the remit of traditional cash flow projections, credit loss modelling or interest rate yield curves. We will need to know what issues to pay attention to, how those issues affect your business and find a common language to discuss them in a meaningful way. To this end, the Bank and Securities Commission Malaysia, are collaborating with the World Bank to develop a principles-based taxonomy to enable financial institutions in Malaysia to classify green assets consistently. This framework aims to support informed decisions and analysis of exposures to climate risk in fund raising, lending and investment activities. The Bank expects to issue the first draft of the taxonomy by the end of this year for industry feedback prior to its adoption.

Second, we need to develop a **more complete understanding of the impact of climate-related risks** to the Malaysian financial system and economy. In this regard, the Bank is actively involved in working together with the *Central Banks and Supervisors Network of Greening the Financial System* (NGFS) to develop an analytical framework to assess such risks. This entails sizing the impact of climate change on our financial system and economy, both in the central case and tail-end scenarios. This exercise also aims to estimate the relevant time frames in which these risks may materialise. To do so, we would need to better understand the transmission channels of climate-related risks, taking into consideration potential second-round effects and feedback loops. Ultimately, this exercise would provide valuable insights on how to best integrate climate-related risks into the Bank's macroeconomic and financial surveillance activities and feed into wider policy responses to climate change.

Third, we will need to address the appropriate **treatment of climate risks within the prudential and supervisory frameworks** for financial institutions. As a start, the Bank will require financial institutions to report their exposures to climate risks once work on the green taxonomy has been finalised. Information gathered through this process will be used by the Bank to consider changes to prudential standards to better reflect risks from climate-related exposures. Concurrently, the Bank also intends to align, where relevant, the reporting requirements for climate-related risks with the Value-Based Impact Assessment Framework (VBIAF), which will be finalised by October this year, as well as its corresponding VBIAF Sectoral Guide, which is currently being developed. In addition, the Bank will increase its engagements with individual financial institutions to better understand how they consider climate risks in their risk management approaches and practices.

Fourth, we need to **strengthen the use of disclosures** more broadly, to provide greater transparency on how climate risk considerations are integrated into business decisions. Such disclosures, by both financial institutions and non-financial firms, will help drive action towards more effective risk mitigation and better adaptation to climate change. To this end, the Bank will work with the industry to implement the recommendations of the FSB Task Force on Climate-related Financial Disclosures (TCFD) in Malaysia.

Fifth, the financial industry will need to step forward and **facilitate an orderly transition for households, businesses and governments to adapt** to the physical and transition risks of climate change. This involves different players in the financial ecosystem – including banks, insurers and takaful operators, venture capital and private equity firms – to ideate and innovate solutions that would help the economy face the imminent climate-related risks. There is an urgent and critical need to develop sustainable financial solutions, including funding and investment structures with appropriate incentives and support mechanisms, to catalyse greater climate resilience for firms and households.

Building climate resilience is no small feat. There is much work to be done with a window to accomplish this work that is rapidly closing. Clear policy at the national level will be critical to enable the financial industry to size up the physical and transition risks, and implement strategies to manage these risks. Sector-specific approaches will also need to converge to limit risks of a disorderly transition. This is a shared responsibility that requires us to come together to support joint and coordinated responses to a clear and present threat to growth and financial stability. To this end, I am pleased to announce that the Bank and the Securities Commission Malaysia are establishing a Joint Committee on Climate Change with industry representation to pursue collaborative actions for building climate resilience in the Malaysian financial sector. The key mandates of the Joint Committee are to:

- Build capacity through the sharing of knowledge, expertise and best practices in assessing and managing climate-related risk;
- Identify issues, challenges and priorities facing the financial sector in managing the transition towards a low carbon economy; and
- Facilitate collaboration between stakeholders in advancing coordinated solutions to address arising challenges and issues.

Beyond resilience

As we intensify our efforts to increase climate resilience, let us not forget that climate action begins with each of us. For the Bank, this has meant making changes to our own internal operations to reduce our carbon footprint. For several years now, we have been watering our grounds using rainwater harvested by our roofing systems. We have also actively reduced our carbon footprint in our currency management operations. We print fewer brand new notes and use durable polymer banknotes to prolong their lifespan in circulation. We also employ co-processing, where shredded old notes are converted into productive energy – this has saved 440 tons of CO_2 emissions since 2016. The Bank has also embarked on a digitalisation strategy that will significantly reduce internal usage of paper. We have also progressively moved to incorporate wider sustainability considerations in our investment decisions.

Within the financial sector, the leadership shown by the Islamic finance industry in adopting value-based intermediation is a positive step towards sharpening the focus of finance on creating a positive impact to the economy, people and the environment. Several financial institutions are also allocating more capital towards innovation that promotes sustainability – such as in renewable energy sources, and sustainable agro-production and manufacturing. Others are providing incentives to encourage "greener" consumption that is less damaging to the environment. This includes preferential rates for hybrid vehicles and financing projects with a Green Building Index certification which serve to encourage manufacturers and developers to build more sustainable solutions.

Climate change will have irreversible consequences for us all. The effects to the planet, and global efforts to transition towards greater sustainability, will certainly have implications for the economy and for financial stability which cannot be ignored. Our window of opportunity to act is narrowing very quickly. In the period ahead, it is crucial that the financial industry faces these changes in a deliberate, informed manner. We must respond strategically, and pre-emptively; and we must act now. We can no longer afford to just react once the worst has already happened. The stakes are simply too high.

On our part, the Bank is committed to ensuring that the financial system remains resilient in the face of these risks. To this end, I have set out a broad outline for achieving climate resilience. The task ahead will call for strong leadership in working with authorities, businesses and households to address what may be one of the greatest threats to our generation.

Discussions at this conference aim to help us meet this challenge with greater confidence and conviction on what must be done – individually and collectively. On that note, I look forward to the engaging sessions ahead. Thank you.