Harnessing Nature for Climate Action:
Opportunities for Businesses and Governments
Keynote Speaker

Ms. Grace Fu
Minister for Sustainability and the Environment, Republic of Singapore

Panellists

Panel 1: From Article to Action – Implementing Article 6 and Piloting Carbon Credit Schemes

Ms. Herry Cho
Managing Director, Head of Sustainability and Sustainable Finance, Singapore Exchange

Mr. Eric Lim
Chief Sustainability Officer, United Overseas Bank

Mr. Daniel Lee
Head of Commercial, Climate Impact X

Mr. Eka Ginting
Co-founder, PT Rimba Raya Conservation and Director, PT Prato Verde Indonesia

Panel 2: Innovative and Cooperative Approaches to Forest Conservation

Mr. Craig Tribolet
Sustainability Operations Manager, Asia Pacific Resources International Holdings Ltd

Mr. Michal Zrust
Co-founder and Executive Director, Lestari Capital

Dr. Henry Purnomo
Senior Scientist and Indonesia Deputy Country Director, Centre for International Forestry Research

Mr. Rod Taylor
Global Director of the Forest Program, World Resources Institute

Moderators

Associate Professor Simon Tay
Chairman, Singapore Institute of International Affairs

Mr. Nicholas Fang
Director, Security and Global Affairs, Singapore Institute of International Affairs

Dr. Nirarta Samadhi
Country Director, World Resources Institute Indonesia
The Singapore Dialogue on Sustainable World Resources (SDSWR) is the Singapore Institute of International Affairs (SIIA)’s flagship Sustainability event. The SDSWR facilitates dialogues between governments, the private sector, experts, and NGOs, to help drive ASEAN’s transition towards sustainability. First held in 2014, following the severe transboundary haze event in 2013, the SDSWR has a special focus on transboundary haze and the agri-business and forestry sectors. From this, the SDSWR has explored the need for green supply chains, sustainable finance and investment, and regional cooperation to achieve climate impact. The dialogue has become a premier platform in Singapore for policymakers, business leaders and NGOs to share knowledge and best practices, and to socialise national and corporate commitments towards a more sustainable ASEAN. The SDSWR also seeks to foster the development of cross-sector collaborations and, via media coverage, raise awareness about sustainability issues among the wider public.

The dialogue typically attracts about 300 high-level participants. Past keynote speakers have included ministers from Indonesia, Malaysia, and Singapore. Panel discussions have included CEOs of major multinational corporations, financial institutions, investors, and leading global experts.

9th SDSWR: Harnessing Nature for Climate Action: Opportunities for Businesses and Governments

Countries around the world are setting ambitious net zero targets, and alongside this push towards carbon neutrality, the need to protect natural ecosystems has also entered the mainstream. Forest and land management is key to achieving climate goals, especially in the Southeast Asian context, where countries are home to vast natural landscapes. In this regard, the growing global interest in carbon markets can support ecosystem conservation and restoration efforts in the region. Research shows that the protection of 58 percent of Southeast Asia’s threatened forests can be financially viable even at modest carbon prices.

However, there are still challenges that must be addressed. Although governments and businesses are keen to buy and sell carbon credits, the mechanics of carbon trading are not widely understood. Similarly, while the need to protect forests has entered the mainstream, many conservation projects are still supported largely by philanthropic funding or on a CSR basis. Businesses and investors are starting to adapt their operations to support sustainable outcomes in a more integrated fashion, but this remains an ongoing process.

In addition, the Russia-Ukraine conflict has led to a global energy crisis and renewed concerns about inflation. The world is now needing to balance climate action with the pressures imposed by continued COVID-19 disruptions, geopolitical tensions, and new economic disruptions. In his welcome remarks, Associate Professor Simon Tay, Chairman, Singapore Institute of International Affairs, emphasised the need for countries to stay the course on climate action, as climate change is now an existential imperative. Efforts to strengthen economic recovery and ensure growth must synergise with climate goals.
Haze Outlook 2022

The SIIA launched our fourth annual Haze Outlook at the 9th SDSWR. The report that the region would not see another severe transboundary haze crisis in 2022. However, the Haze Outlook 2022 report warned that there was some elevated risk of fires and haze compared to recent years, due to volatility in the agricultural commodities market caused by COVID-19 and exacerbated by the Russia-Ukraine War. If commodity prices remain elevated, this could encourage growers to open up more land for plantations – and some may do so unsustainably, with the use of fire, thus increasing the risk of haze.

To download the report, please visit www.siiaonline.org/haze-outlook-2022/ or use the QR code

Acknowledgements and Reach

Nearly 300 participants registered for the 9th SDSWR, primarily from the financial, supply chain, energy, tech, and agri-business sectors. The dialogue and the Haze Outlook 2022 report received substantial coverage from local and international media, with 14 mentions by prominent media outlets including The Straits Times, Berita Harian, Lianhe Zaobao, Channel NewsAsia, Vietnam News Agency, BBC News, and Mongabay.

We would like to acknowledge and thank our sponsors who have contributed to the success of the Dialogue: Gold Sponsor – Temasek Foundation and Silver Sponsor – Royal Golden Eagle (RGE).
“Until the Ukraine conflict a few months ago, efforts were underway to pivot COVID-19 recovery towards building back better. Nations now find themselves at the confluence of on-going COVID-19 disruptions, stagflation, geostrategic contestation, and climate change,” said Ms. Grace Fu, Minister for Sustainability and the Environment, Republic of Singapore, in her keynote address at the 9th SDSWR.

“The war in Ukraine has caused some governments to walk back on energy commitments and re-look coal as a stopgap measure against record fuel prices,” Ms. Fu observed.

Unfortunately, the effects of climate change cannot be ignored. Extreme weather events are continuing to impact the world and will further worsen energy and food security concerns. Drought conditions in 2022 have already reduced crop yield in parts of Africa, Europe, and South America.

“So how do we keep climate change on the radar screen and at the top of the mind of leaders? That’s really our challenge, and that’s really our imperative for COP27,” Ms. Fu said, referring to the 27th United Nations Climate Change conference taking place in Egypt in November 2022.

International Partnerships for Common Good

Ms. Fu shared her unique perspective on international climate talks and the challenges involved in reaching a deal that all countries can agree on. Ms. Fu was the co-chair for ministerial discussions on Article 6, the portion of the Paris Agreement that establishes rules and norms for cross-border carbon trading. Countries reached consensus on Article 6 at COP26 in 2021.

“Nations formed partnerships to accelerate momentum on global climate action by committing to a common goal despite differences,” Ms. Fu said, looking back at the Article 6 talks.
Singapore has taken steps to assist other nations where it can. In 2018, Singapore launched the Climate Action Package to support green capacity-building for developing economies in the region. Singapore has also been at the forefront of developing carbon markets and playing important roles in global carbon initiatives, such as the World Bank’s Climate Warehouse on carbon credit trade and the Clydebank Declaration for green shipping corridors.

“We benefit when everyone does better, including ourselves,” Ms. Fu said.

Working Together to Address the Haze

Alongside new and emerging climate issues, Ms. Fu noted that the Association of Southeast Asian Nations (ASEAN) must continue to address recurring challenges such as the haze. “Singapore appreciates the efforts of President Joko Widodo and Minister Siti Nurbaya, who have exercised strong leadership and commitment to preventing fires. Should hotspots escalate, Singapore stands ready to support and assist Indonesia as we did during the international fire-fighting efforts in 2015,” she said.

Charting the Way Forward

2022 marks the 50th anniversary of Singapore’s Ministry of Sustainability and the Environment. When it was formed in 1972, few governments had a ministry dedicated to environmental challenges. In this regard, Singapore was ahead of its time. 2022 also marks the 60th anniversary of the SIIA. The institute was founded in 1962 by a group of like-minded thinkers, including Ambassador-at-Large Tommy Koh, who felt that Singapore needed to better understand regional issues.

“How do we chart a way forward amidst challenges and uncertainty? We can glean some lessons from SIIA’s genesis to address our geo-strategic, political, economic, and environmental problems,” Ms. Fu said, highlighting the need to leverage partnerships to overcome common challenges.

“Over the years, the SIIA has been a key observer of political and economic issues for ASEAN and for our region,” said Associate Professor Simon Tay, Chairman of the SIIA, who moderated the dialogue with Ms. Fu. “We’ve always conducted policy analyses, fostered dialogues, and helped to bridge gaps between policymakers, private sector decision-makers and experts to try to shape progressive public policy and respond to emerging problems.”

In late 2021, the SIIA launched a report titled “Greening the Road Ahead: Building a Collective ASEAN Climate Community”, encouraging ASEAN countries to synergise climate action efforts. “Moving forward, the SIIA will continue to identify areas for action and help support effective climate policies, and identify incentives needed for Singapore and ASEAN to move towards sustainable growth,” Prof Tay said.
“For the Singapore Dialogue on Sustainable World Resources, we traditionally focus our discussions on the commodities sector and forests, linked to the haze issue,” said Mr. Nicholas Fang, Director, Security and Global Affairs, SIIA, who moderated the first panel at the 9th SDSWR and served as emcee for the day.

“A major source of carbon credits in ASEAN is actually from forest conservation and restoration projects,” said Mr. Fang, explaining why carbon markets and carbon credits were key topics at the 9th SDSWR.

Interest in carbon markets has been growing over the past few years. At COP26 in 2021, countries agreed on rules to govern international trading of carbon credits under Article 6 of the Paris Agreement. Singapore has long seen the potential in carbon trading, and within the region, Indonesia, Malaysia, Vietnam, and Thailand are also developing carbon market policies.

A carbon credit is a permit to emit a set amount of greenhouse gases, which can be purchased by organisations to offset their emissions. Credits are generated by projects that avoid, reduce, or remove emissions, and so the purchase of carbon credits helps to fund climate action.
The Role of Carbon Markets in Decarbonisation

“At the end of the day, as a green economy, we can’t take up all of the carbon that the modern economy produces. That’s where carbon offsets become relevant,” said Mr. Eric Lim, Chief Sustainability Officer and Managing Director – Group Finance, United Overseas Bank (UOB).

“The democratising of access to carbon markets and credits will help businesses, especially small- and medium-sized enterprises, offset their hard-to-abate emissions in the near to mid term, as they continue to advance their decarbonisation pathways in the long run,” said Mr. Lim.

Carbon markets go hand-in-hand with other measures to reduce emissions, such as carbon tax policies. In Singapore, emitters will be able to use carbon credits to offset up to 5 per cent of their taxable emissions from 2024, lowering their tax liability. While Singapore is currently the only ASEAN country with a carbon tax, others in the region are considering carbon tax policies. Indonesia was planning to implement a carbon tax in July 2022, though its introduction has been delayed due to the current global economic situation.

“[Carbon markets are] an opportunity to prepare, or plan, for costs that are going to be externalised on your balance sheet in the future if you don’t take action today,” said Ms. Herry Cho, Managing Director, Head of Sustainability and Sustainable Finance, Singapore Exchange (SGX).

SGX has published white papers to provide listed companies with guidance on sustainability issues, including a decarbonisation report in 2021 that outlines what carbon mitigation and green transition involves, and how carbon markets fit into that picture.

Consumer Demand for Carbon Credits

Top-down action by regulators will encourage businesses to engage with carbon markets, but it is also important to consider ground-up demand. Currently, ordinary consumers rarely engage directly with carbon marketplaces and exchanges, but consumers can already purchase goods and services that have an offsetting element. Some electricity retailers in Singapore offer carbon neutral power plans, where the purchased electricity is still generated by fossil fuels, but the price of the plan includes carbon credits to offset emissions. Singapore Airlines has a voluntary offset programme for both passengers and cargo customers.
Enabling Regional and Global Carbon Markets

For carbon markets to achieve their potential, the right frameworks must be in place to connect carbon credit buyers to sellers with clear pricing. On the supply side, for carbon credit projects to succeed, operators need clarity on the legislative or policy environment governing this space, especially as many carbon projects are long multi-year or multi-decade endeavours.

ASEAN countries are still in the process of developing carbon market policies. For instance, Indonesia issued a presidential regulation on carbon trading and carbon credits in 2021, but the implementing regulations to create institutions such as a national carbon registry are still being rolled out.

There is some scepticism surrounding carbon trading, related to concerns about greenwashing and whether carbon projects truly have additionality – projects need to prove that the sale of carbon credits is allowing them to avoid, reduce, or remove emissions. If an emissions reduction would have happened anyway, without any credits being purchased, then the sale of offsets did not really result in a positive impact.

These concerns have led to both governments and the private sector calling for more stringent standards to be created for carbon offsets, or the establishment of new verification mechanisms.

Mr. Daniel Lee, Head of Commercial, Climate Impact X (CIX), a carbon exchange and marketplace based in Singapore, said that while some caution is justified, countries in our region should not let “perfect” be the enemy of “good”.

“We should not let these issues paralyse action completely or detract from the positive role that carbon markets can bring.”

Mr. Daniel Lee
Head of Commercial, Climate Impact X (CIX)

“If we can create demand from all consumers, I think that would be explosive, and more lasting, than regulatory [measures],” said Mr. Eka Ginting, Co-founder of PT Rimba Raya Conservation, which runs one of the largest carbon credit and forest conservation projects in the world.

“We should not let these issues paralyse action completely or detract from the positive role that carbon markets can bring,” Mr. Lee said. He encouraged government regulators to work with existing standards bodies in the global voluntary offset market such as Verra and Gold Standard, building on their experience and expertise.

In addition to public-private collaboration, regional cooperation is also needed to enable the trading of carbon credits across borders. The Article 6 talks at COP26 established guidelines for cross-border carbon trading, for instance to avoid double counting of emissions reductions towards Paris Agreement targets when carbon credits are traded from suppliers in one country to buyers in another. However, countries still need to align their policies and national mechanisms to support the emerging international trade in offsets, so carbon markets can achieve efficiency and scale.
The generation and sale of carbon credits from nature-based solutions (NBS) projects is a promising avenue for financing ecosystem conservation and restoration efforts, one that is attracting interest. But carbon trading is not the only approach to conservation.

“There's new opportunities in [pairing] sustainability with economic growth, it's quite emerging in ASEAN,” said Dr. Nirarta Samadhi, Country Director, World Resources Institute (WRI) Indonesia. Increasingly, the agricultural commodities sector and downstream businesses are incorporating conservation and biodiversity considerations in their supply chains.
“We have been able to deliver our ambitious conservation and restoration [approach] because we’ve been able to embed sustainability and conservation into our whole business planning.”

Mr. Craig Tribolet
Sustainability Operations Manager, Asia Pacific Resources International Holdings Limited (APRIL)

“Conservation Entering the Mainstream

“The concept of conservation and protection has now actually entered the mainstream,” said Mr. Craig Tribolet, Sustainability Operations Manager, Asia Pacific Resources International Holdings Limited (APRIL). APRIL is one of the largest pulp and paper product manufacturers in the world, with their operations including mills and plantation forests in Indonesia.

The Paris Agreement and the progress made at COP26 in Glasgow demonstrate that the world has moved beyond simply talking about the opportunity for businesses to act. Now the expectation is that businesses must take definite steps to address climate issues, halting and even reversing their impact on the environment.

At the national level, Indonesia has committed to achieving net carbon sink in its forest and other land use (FOLU) sector by 2030, meaning that the sector will remove more emissions than it produces. This is an extremely positive signal, as the FOLU sector currently accounts for nearly half of Indonesia’s annual greenhouse gas emissions. To achieve this target, Indonesian policymakers will need to work together with the private sector and local communities.

“We, as a company, continue to learn and adapt,” Mr. Tribolet said. “We have been able to deliver our ambitious conservation and restoration [approach] because we’ve been able to embed sustainability and conservation into our whole business planning.”

APRIL employs what it calls a “production-protection model”, which includes surrounding its conservation project area with plantations to discourage illegal encroachment by other parties. APRIL is also currently investing US$1 per tonne of fibre harvested from its plantations into conservation and sustainability initiatives under its APRIL2030 emissions reduction strategy. In 2021 this amounted to US$12 million in funding.

“A lot of companies are worried about the emissions attached to the commodities they procure. I think this new interest is probably driving a lot of the traders to eliminate deforestation from their supply chains in the next decade.”

Mr. Rod Taylor
Global Director of the Forest Program, World Resources Institute (WRI)
Challenges in Operating and Financing Conservation Projects

The private sector’s interest in sustainability is encouraging, but at the same time businesses must be aware that addressing deforestation and protecting ecosystems is a long-term undertaking.

“Conservation is not always easy. It’s not always cheap. And it’s also not always guaranteed to succeed,” Mr. Tribolet said. He cautioned that businesses might not “get it right the first time”, though he added that there can be valuable lessons to be learnt from such failures, if businesses are able to share their experiences honestly and transparently.

“The way we are demonstrating financial incentives for conservation is really not fit for purpose. And it hasn’t been for many years,” said Mr. Michal Zrust, Co-founder and Executive Director, Lestari Capital. “Conservation is still largely being funded by philanthropy, by CSR projects... there’s fickleness to these funding sources.”

Lestari Capital is a Singapore-based company that works with the financial and agri-business sectors to mobilise finance for conservation projects in Indonesia. They have developed a portfolio of high-impact projects linked to financing from the commodities sector, with funding commitments for 25 years or longer.

“Conservation is difficult,” Mr. Zrust continued. “We need planning for 10, 20, years ahead, and these projects need financial security in order to be able to deliver.”

Importance of Multi-Stakeholder Engagement

In addition to the advent of creative new investment and financing platforms, technological innovation is making a difference in how forest conservation is carried out, leading to new forms of collaboration between governments, companies, and NGOs.

Satellite images and radar data are allowing for more accurate real-time alerts when forest fires are detected. Mr. Taylor explained that innovative groups of companies are working together with local authorities and NGOs in Indonesia and Malaysia. When companies receive alerts, government agencies and NGOs are also notified, and all stakeholders can work together to determine if the alert is a real forest fire or a false alarm. In this way, fires can be addressed before it is too late.

In order for fire prevention and ecosystem conservation initiatives to succeed, it is also crucial for project operators and companies to engage with local communities.
“Climate protection is often not as relevant to locals. Stakeholders need to develop solutions that benefit the community, to make the issue more relevant to locals, instead of discussing climate protection generally,” said Dr. Herry Purnomo, Senior Scientist and Indonesia Deputy Country Director, Center for International Forestry Research (CIFOR).

Engagement with local communities on climate and sustainability issues can be sensitive, as people may have different value systems and views on how forests should be used. It is therefore crucial for project operators to ensure that everyone living in or near the area feels that they have some ownership and involvement in the project. Communities need to see that there are tangible benefits from conservation and restoration efforts.

Dr. Herry Purnomo
Senior Scientist and Indonesia Deputy Country Director, Centre for International Forestry Research (CIFOR)
**Highlights:**

9th Singapore Dialogue on Sustainable World Resources

The SDSWR is a flagship event of the Singapore Institute of International Affairs (SIIA), and a premier sustainability platform for Singapore and the region. The dialogue focuses on issues related to the prevention of transboundary haze, sustainability in ASEAN’s agri-business sector, and broader climate change issues. The SDSWR seeks to foster the development of cross-sector collaborations towards a more sustainable ASEAN and, via media coverage, raise awareness about sustainability issues among the wider public.

**Profile of Participants**

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**Participants by Sector**

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*Note: Total percentage may not add up to 100% due to rounding.*

**Media Highlights**

1. Ukraine war has made some governments walk back on energy commitments: Grace Fu, CNA, 28 June 2022

2. 傅海燕：受战事和气候影响 年底联合国气候变化大会 料将面对艰巨挑战 (Grace Fu: Affected by war and climate, COP27 is expected to face daunting challenges), Lianhe Zaobao, 29 June 2022

3. Cảnh báo nguy cơ khói mù trở lại ở Đông Nam Á trong năm nay (Risk of haze returning in Southeast Asia this year), Vietnam News, 29 June 2022

4. As dry season starts in Indonesia, risk of fires — and haze — looms, Mongabay, 6 July 2022
About the Singapore Institute of International Affairs (SIIA)
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Established in 1962, the Singapore Institute of International Affairs (SIIA) is a non-profit and independent think tank committed to producing policy analysis, fostering in-depth dialogues and bridging gaps between policymakers, private sector decision-makers and experts to shape public policy and social responses. Centred around ASEAN focused themes, the institute aims to deliver policy analysis in international affairs and on issues driving environmental sustainability. The SIIA has been consistently ranked as one of the leading think tanks in Southeast Asia and the Pacific, in the Global Go To Think Tank Index by the University of Pennsylvania. Since 2017, the SIIA was ranked the No. 1 independent think tank in Asia. It was also recognised as one of the top 50 think tanks globally, excluding the United States of America. For two consecutive years since 2019, it was recognised as the No. 1 think tank in South Asia, Southeast Asia, and the Pacific (excluding India). In 2020, it was also recognised as one of the think tanks with the best policy and institutional response to the COVID-19 pandemic.

About the SIIA’s Sustainability Programme

The SIIA’s Sustainability Programme was established in 1997 when it organised Singapore’s first haze dialogue with the Singapore Environment Council. Since then, the Sustainability Programme has evolved to address a range of sustainability issues ASEAN faces. The Programme continues to focus on the forestry sector, as well as using green finance and carbon financing as levers to advance supply chain sustainability and drive Southeast Asia’s green recovery from the COVID-19 pandemic.

As part of its Sustainability Programme, the SIIA facilitates dialogues between governments, private sector, academia and NGOs. One of the SIIA’s key platforms is its flagship event, the Singapore Dialogue on Sustainable World Resources (SDSWR), launched in 2014. The annual event attracts about 300 high-level participants to discuss best practices, new commitments and noteworthy cross-sector collaborations in ASEAN’s resource sector.

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