

WEALTH & INVESTING



INSIGHTS FROM
CFA SOCIETY SINGAPORE

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Investing in a greener world

Financing the conservation of peatlands in South-East Asia offers the opportunity to preserve natural capital

AT the end of July, PTT Public Company Ltd issued a 15 billion Thai baht (\$647 million) green bond certified by Climate Bonds Initiative (CBI), a not-for-profit international organisation for climate change solutions, against its forestry criteria in the Thai domestic market.

The Thai oil and gas conglomerate has been running a reforestation project on one million rai – equivalent to 1.6 million hectares (Mha) of land – since 1994 for evergreen forests on mountains in the north, and on lower plains in the Central and Eastern Regions of Thailand. This green bond issued under PTT's Green Bond Framework will finance the preservation and conservation of forests in Thailand.

There is significant potential for similar projects in the region. About half of the world's tropical peatlands (about 25 million ha) are in South-east Asia. In the past, these pristine intact peatlands supported the livelihoods of small numbers of indigenous people through fisheries, hunting and the provision of non-timber forest products.

Since the 1990s, these forests have gradually been drained and utilised primarily for monoculture plantation development of tree crops such as acacia (paper and pulp wood) and oil palm. As a result, forest cover in South-east Asia has declined from 11.9 million ha to 4.6 million ha between 1990 and 2015.

The commercial benefits of these plantations, although lucrative, are short term. The loss of natural capital via peatland oxidation causes significant long-term environmental and climate damages, as well as socio-economic issues.

Peatlands, haze and floods

The emergence of haze as a significant environmental issue in South-east Asia is linked with the logging, drainage and burning of peatland forests. Particulate pollution has worsened over recent years. The 2015 fire season alone is estimated to have caused persistent exposure of 69 million people to unhealthy air-quality conditions and nearly 12,000 premature deaths.

The primary underlying driver is the draining of peatlands that makes the peat drier and increasing its flammability, resulting in extreme episodes of smoke pollution including smouldering combustion of the huge carbon stores below the peat surface that can persist for long time periods.

Peatland fires are also a major source of atmospheric greenhouse gas (GHG) emissions, accompanied by emissions of methane and other toxic gases, such as carbon monoxide, hydrogen cyanide and formaldehyde. The plumes of dense, toxic smoke from peat fires pose significant risks to human well-being and impact negatively on livelihoods and economies.

It is also well documented that the damage due to fires has severe impact on nature and biodiversity. Deforestation and drainage alter the natural hydrological and biogeochemical functions of the peatland,



Peatland fires, like this one in Indonesia, are a major source of atmospheric greenhouse gas emissions, accompanied by emissions of methane and other toxic gases. BT FILE PHOTO

resulting in loss of water storage and less anoxia, enhanced peat decomposition and long-term land subsidence. Thus, 78 per cent of total GHG emissions from peat oxidation in South-east Asia occurs from managed land cover types.

The oxidation of peat results in land subsidence, leading to frequent and prolonged flooding when the peat surface subsides below the sea or river levels. This, in turn, impacts the livelihood of the people and has profound negative socio-economic impact.

Is preservation of natural capital investable?

The emergence of the green bond and green loan market globally offers an opportunity to finance projects with a positive impact on the environment over the long term.

According to data compiled by CBI, US\$891 billion of climate bonds have been issued cumulatively at the end of July 2020.

Green bonds have emerged as thematic instruments, which global investors can choose from to align their investment goals with a low-carbon transition. By complying with the Climate Bonds Standard (through the certification offered to bond issuers by CBI), the European Union's Green Bond Standard or the Green Bond Principles by the International Capital Markets Association (ICMA), bond issuers are experiencing strong interest in green instruments raised on capital markets.

This growing loan market has developed itself from four main pillars, which command issuers of green instruments to:

- Select a project within certain categories of eligibility (for example, "environmentally sustainable management of living natural resources and land use", "ter-

restrial and aquatic biodiversity conservation, including watershed environments" or "sustainable water management, including flooding mitigation");

- Have a process for evaluating projects;
- Manage the capital raised as a sub-portfolio; and
- Report on these projects.

Complying with these four pillars allows issuers to claim the coveted name of "green" bond, giving them access to more investors' portfolios and achieving high levels of subscriptions on their launch as the certification against the Climate Bonds Standard reinforces the credentials of such green bond offering.

More and more capital from off- and on-shore sources are being increasingly allocated to the green space. The "Green Bond European Investor Survey 2019" published by CBI showed that a large majority of respondents highlighted a preference for capital to be used for water (77 per cent) and land use (64 per cent), where land-use change (by deforestation, drainage and fire) in peatlands is a substantial source of greenhouse gas emissions under land use, land use change and forestry (LULUCF) sector.

However, as of 2019, these categories represented only 12 per cent and 4 per cent of the global issuance to date. Hence, there is good opportunity to issue green bonds related to the LULUCF sector.

The opportunity is also particularly relevant to sovereign green bonds, which are bonds issued by a country to finance projects of various kinds. In a policy publication in February 2020, researchers from the London School of Economics and Political Science have studied the dependence of sovereign debt on nature. They argue that, from 2023 onwards, countries will need to enact policies on climate change which will impact sovereign debt.

The researchers found that "28 per cent of Argentina's sovereign bonds and 34 per cent of Brazil's sovereign bonds will be exposed to an anticipated tightening of climate and anti-deforestation policy in the 2020s, while 44 per cent and 22 per cent of their sovereign bonds, respectively, are exposed to changes in policy after 2030".

Coupled with sovereign issuance of only 21 per cent for land use which include peatlands, there is also tremendous opportunity to grow the land use segment.

Tropical peatlands falling under the LULUCF sector are a treasure to protect in this region. With the right financing instruments supported by appropriate regulatory frameworks, institutional capital can be directed to good use to finance projects that have not only economic and social impact, but also to preserve the natural capital which is the essential pillar for a greener world.

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