

## D4S Q&A #2

### Tropical peatlands & carbon emission reduction investments

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***The enormous carbon emissions from millions of hectares of drained and burning tropical peatland in SE Asia have attracted interest from investors for many years. While this has supported some peatland restoration projects, these are still relatively small scale and limited in number, and their efficiency in reducing carbon emissions is sometimes questioned. So why are there no greater investments in large-scale and highly effective peatland restoration projects?***

*Some considerations based on our experience and insights:*

#### **What are the main obstacles to large scale investments in tropical peatland restoration?**

Current investments into tropical peatland restoration are often considered to be below their potential. The main obstacles may be summarized as follows:

Opportunity cost: many drained peatlands produce crops, and others that do not are still considered by some to potentially become productive in future. This adds substantial (potential) cost to peatland restoration where this involves giving up production.

Failure risk: in the less controlled parts of SE Asia, there have been large scale peatland fires as well as unplanned drainage developments. Where this happens in a restoration project, carbon emission reduction may be undone and no 'credit' can be claimed.

Monitoring complications: tropical peatlands, even when deforested, have dense vegetation cover which complicates satellite measurements of subsidence (as a measure of carbon loss) and water table depth / soil moisture that drive the carbon loss. This reduces the confidence in verification of emissions reductions.

Additionality: Indonesian government and large private plantation industries have announced moratoriums on peatland drainage, although this excludes existing concessions and is sometimes poorly implemented, and may claim credit for restoration achievements. This complicates investor claims to exclusive funding of a restoration activity.

Target confusion: while the stated target is often 'restoration', this is not the impact that most existing projects can hope for. Some projects are mostly protecting existing peat swamp forest, which will only reduce emissions compared to a scenario where the peatland would be converted to plantation – such scenarios are less plausible with current moratoriums in place. Other projects claim credit for preventing further fires in already burnt peatland – but such fires are now generally limited by stricter law enforcement, and preventing fires alone will not restore natural peat swamp forest and associated carbon capture in biomass.

Tenure: especially in Indonesia there are often overlapping claims to peatland, as these areas were only opened up recently with no previous recorded ownership or human land use. This results in uncertainties on tenure and on who can claim the credits for restoration.

Leakage: an investor must prove that restoring an area does not result in degradation in another area. This is difficult to monitor and quantify especially for smaller plantations that are largely unregulated and often not registered by governments.

**Reputation:** Investing companies are currently under intense scrutiny regarding the quality of their carbon offsets, as is Verra the world's leading carbon credit certifier. This applies especially to tropical forest protection projects, with suggestions of over-crediting.

**Credit yield:** due to the uncertainties summarized above, recent market prices for carbon credits generated by peatland restoration projects in the tropics have typically been below 10 US\$ per tCO<sub>2</sub>e) while they often exceed 20 US\$ in Europe, even in the voluntary market.

While these obstacles are not unique to Southeast Asia or to peatlands, uncertainties are substantially less especially in Europe where much of the available investment into nature based restoration for carbon credits has been directed in recent years.

### **Despite obstacles, what investors are funding tropical peatland restoration at present?**

The sectors that are currently stepping in do so at a relatively small scale and either have specific reasons to be present in Southeast Asia or a high risk tolerance.

In the 'specific reasons' group are companies that source products (palm oil, paper, rubber) from the region and that invest in peatland restoration to support development towards 'Net Zero' across their supply chains. Prominent examples are Unilever, Nestlé, and Procter & Gamble. Since their products are often linked to historical deforestation, they tend to invest in 'Landscape Approaches', creating 'buffer zones' around their source plantations to prevent fires from spreading into their commercial crop areas.

In the 'higher risk tolerance' group are the Heavy Industry, Energy and Transport companies, so-called 'High-Emitters' in sectors that are difficult to decarbonize and that therefore seek large offset volumes to balance their emissions. Some examples are Shell, BP and Eni. Such companies often have the resources to hire science teams to verify carbon emission reduction claims, reducing some trust issues that off scare off other companies.

Another group of investors who can tolerate a higher risk are specialized 'carbon funds' and bank asset managers. These allow institutional investors to put money into 'Climate Funds' managed by experts, spreading the risks associated with directly buying large amounts of credits in a single project.

### **What other investors would be a good match to fund tropical peatland restoration?**

A group of investors that so far has been notably absent from tropical peatland emission reduction initiatives are big tech companies such as Google, Amazon, Microsoft, Meta. Since rapid expansion of energy-intensive AI applications and data centres started in recent years, these companies are seeking very large volumes of offsets, especially as they have announced ambitious targets to become 'net zero' or even 'carbon negative' in the relatively short term of 2030 to 2040 (unlike most other industries). These companies have dedicated investment vehicles aiming to identify and obtain such offsets, and some have already invested in peatland carbon emission reduction. However this has occurred mostly in Europe and mostly at a small scale of 1000 hectares or less. It may be that they are 'testing the water' before entering larger commitments. Given the offset volumes they would require to counter emissions of tens of megatonnes per year for some individual companies and hundreds of megatons for the industry as a whole, tropical peatland emission reduction could be one of only a few attractive options in the longer term. A co-benefit of restoring tropical peatlands is a contribution to biodiversity restoration that exceeds comparable benefits in any other ecosystem, and avoidance of the environmental and social cost of land loss to flooding (see our Q&A #1), which may fulfil other industry commitments.