

Sustainable peatland management contribution to a circular economy in Indonesia

What was the initial challenge that required a solution?

- Peatlands are fragile ecosystems. They perform many ecological functions (ecosystem services) in their natural state – kept in a wet condition – such as carbon sink, water regulation, source of food, natural protection from floods, natural habitat for biodiversity, etc. Any disturbances can quickly revert them from carbon sinks to carbon emitters.
- Tropical peatlands in ASEAN represent about 6 % the World peatlands resources (GEC, APMS review, 2020, unpublished) and Indonesia holds the greatest extension in the region, about 80%, scattered across Sumatra, Kalimantan and Papua (Warren et al., 2017).
- In the 90's pressure to converted peatlands into industrial plantations was high in Indonesia, especially into oil palm plantations. Conversion of peatlands to industrial plantations often requires introduction of drainage systems (canals), lowering of the water table and their wetness. This has been a popular avenue for peatlands because economically is lucrative.

How to provide alternative economically feasible livelihoods to local communities while conserving peatlands wet and functional as ecosystems?



Sustainable peatland management contribution to a circular economy in Indonesia

What was the Nature-based Solution found?

- There are many commodities that naturally thrive on peatlands and that have economic market value. Some known examples include: jelutung, mellaluca, sago, etc. A polyculture approach is always preferable.
- One approach explored in Jambi, Sumatra established a polyculture system combining areca palm plantation (usually planted for the beetle nut) mixed with pineapple and/ or coffee. Hence, offering three commodities to the local communities.
- A by-product of the areca palm is the leaf sheet. This is usually a waste product and burned. However a start up in Indonesia has started to use this by-product to produce biodegradable food packaging – degrades in 60 days – and generates further means of income as well as local job opportunities (micro-factory has been established locally). This innovation contributes to the great problem Indonesia has with waste management and foments a circular economy.
- This example is being studied as a possible avenue for our pilot in Aceh, also in Sumatra depending on the condition of the peatland and local community wishes for our pilot site.

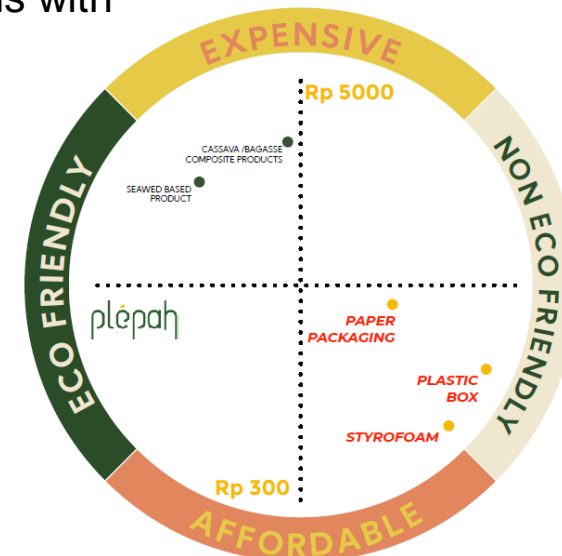


Source: Jentera Garda Futura – Plepah product

Sustainable peatland management contribution to a circular economy in Indonesia

What are 3 lessons learned during the process?

- There are sustainable peatland management practices opportunities in Indonesia already which, not only contribute to peatland conservation and improved local livelihoods, but that can also contribute to a circular economy and other environmental challenges (waste management).
- The need to invest in the preparation phase: establishing network of like-minded practitioners, investigate options explored by others, learn from their experience.
- Engage and explore together innovative commodifiable options with private sector and local communities.



Current Price
Rp 4500



Price Target
Rp 2500

Sustainable peatland management contribution to a circular economy in Indonesia

Which funding organisation finances the project?

- SUPA Component 1 is a co-financed programme by the EU and BMU
- Goal: local communities are financially independent and peatlands are being managed sustainably by the end of project implementation

What is the financial model of the project?

