



CLIMATE COMPENSATED
ORGANISATION



KLS PurePrint®

CLIMATE CERTIFICATE 2021

CEMAsys' Climate Certificate™ is hereby issued as a proof of planting of mangrove trees, for voluntary offsets of own greenhouse gas emissions. As a result of the planting, the project will each year issue climate quotas in line with the VERRA Verified Carbon Standard, and these can be tracked in the register with its unique serial number. The project contributes to meeting a number of the UN's sustainability goals.

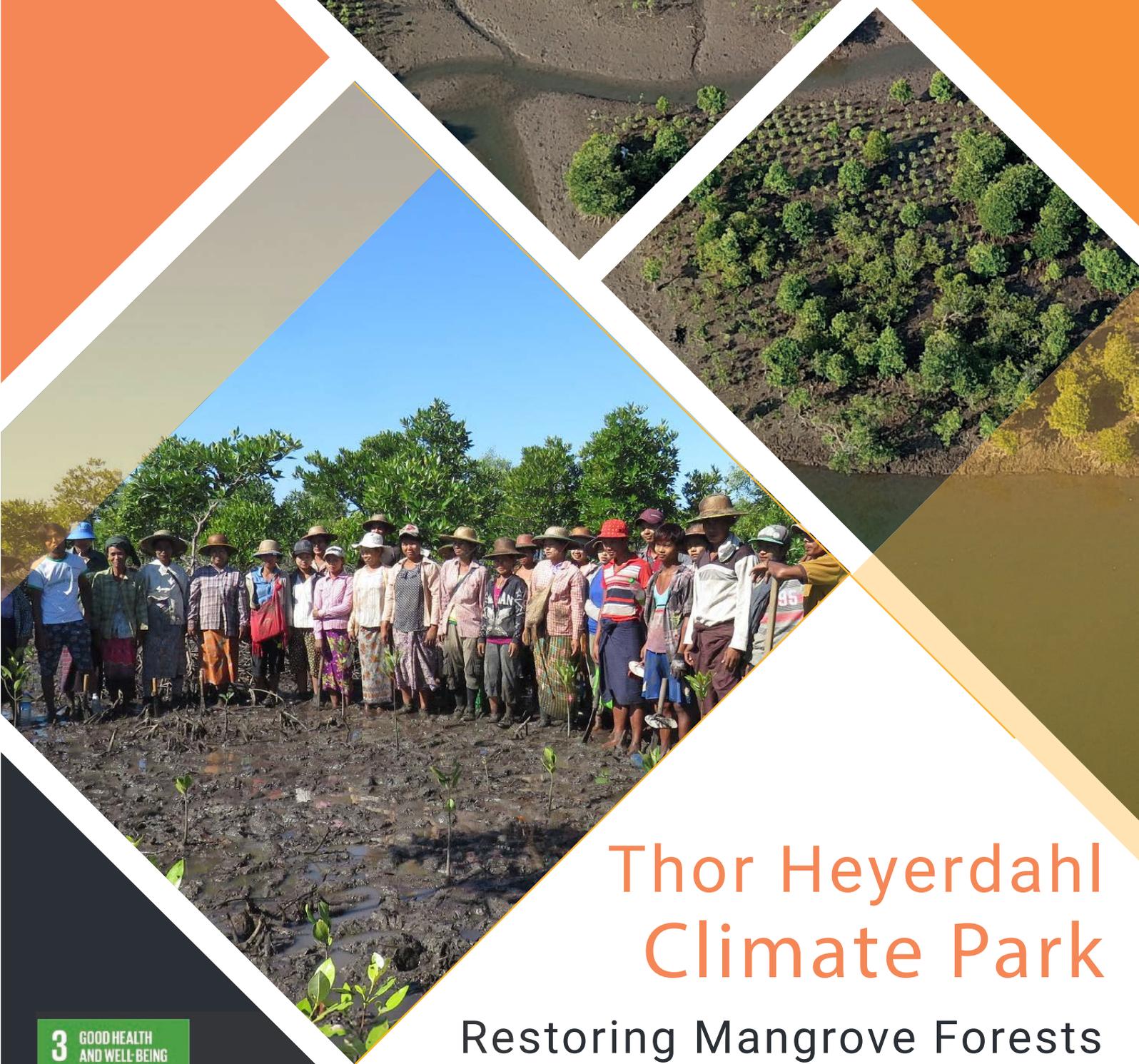
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|-----------------------------------|---|
| Organisation | KLS PurePrint |
| Offsets cover | Klimakompensering trykksager 2021-2022 |
| Volume (tonnes CO ₂ e) | 800 |
| Tree planting | 2 500 Mangrove trees (1 ha, 3 trees per tCO ₂ e) |
| Type | VCU (Verified Carbon Units) |
| Issuing body | VERRA Verified Carbon Standard |
| Project name | Reforestation and restoration of degraded mangrove lands, sustainable livelihood and community development in Myanmar |
| Project reference | https://registry.verra.org/app/projectDetail/VCS/1764 |

The climate quotas will be issued by the VERRA Registry on a yearly basis based on a third-party verification and will be retired from the registry permanently, so that no one else can hold or retire them.

Oslo, 21st of October 2021

Kjetil Selmer-Olsen

CEMAsys.com
sustainability management



Thor Heyerdahl Climate Park

Restoring Mangrove Forests

The Project ■

The Thor Heyerdahl Climate Park projects aims to restore and plant mangrove trees in the Ayeyarwady Region of Myanmar where only 16 percent of the original mangrove forest remains (NASA, 2013).





The destruction of mangrove forests in tropical coastal areas is an ecological disaster for the people who live there, and it is an urgent need that the ecosystems and mangrove forests are restored and managed in a sustainable way. As of 2019, the Thor Heyerdahl planting area is 2100 hectares and will be expanded by an additional 75000 hectares by 2023. The target is to complete planting of 300 million trees by 2023, which will biologically capture and store over 150 million tons of CO₂e.



THE BENEFITS

The restoring and re-planting of destroyed mangrove forests has numerous positive impacts on climate, the environment, and on local socio-economic conditions. Some of these benefits are listed below:

- Mangrove forests protect coastal areas, including animals, people and properties, from extreme weather conditions such as cyclones
- The network of roots also filters polluted water in protection of seagrass and coral reefs.
- Mangrove forests increase seafood production by up to 50 percent and are a crucial habitat to foster biodiversity for endangered animals and plant species.
- Planting mangrove forests create local jobs both directly through breeding and planting, but also indirectly by strengthening the livelihoods of local communities.
- Planting new mangrove forests binds CO₂ from the atmosphere through photosynthesis and thereby contributes to mitigating climate change. One new mangrove tree can bind approximately 1 tCO₂ over a twenty-year period.
- Mangroves mitigate up to 5 times more CO₂e than other trees in the rainforests.
- Of all trees on the planet, the mangrove is the only one which can grow in saltwater.



A Global Benchmark for Carbon



PROJECT STATUS

As of 2019, the first phase of the park has been restored back to its original health with 5.1 million trees (newly planted and rescued) and 3,6 million tons of CO₂ has been documented for VCS registration so far. The project's survival rate of plants is 86 percent, which is far above the average rate of other projects.

The project has also created up to 100 new jobs for the local population in aquaculture and strengthened the local sustainable development with emphasis on women development in MaGyi community.

The success has led to requests from several communities and regional governments for new projects.

With increased financial support, there is no limit for scaling up our activities, and the contributions are therefore of great importance



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