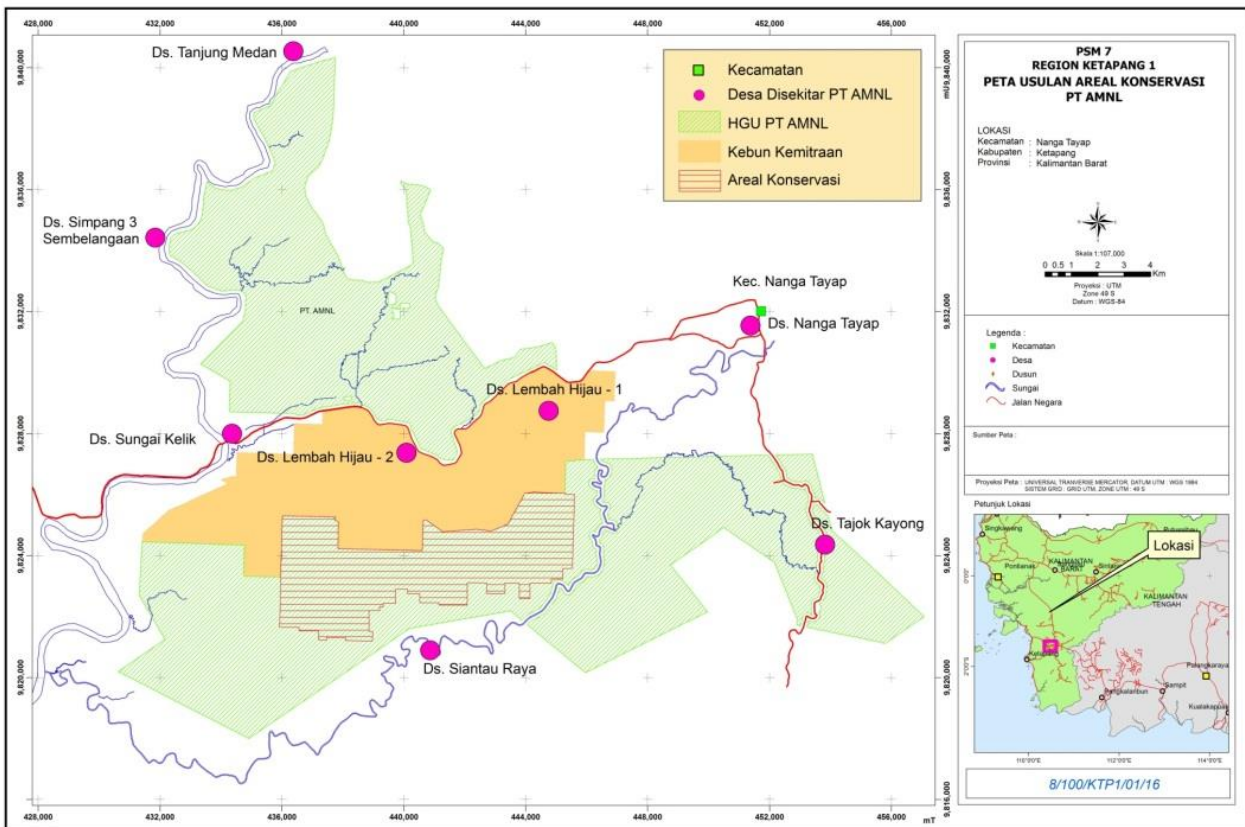


Working in partnership to deliver win-win outcomes for the environment and communities

GAR and L’Oréal collaborate to rehabilitate peatlands

PT Agro Lestari Mandiri (AMNL), a subsidiary of Golden Agri-Resources (GAR), is implementing a rehabilitation project in a peatland area of 2,616.79 hectares in West Kalimantan. The project started in 2016 and aims to reduce carbon dioxide (CO₂) emissions by rehabilitating and conserving peatland – an essential natural carbon sink. L’Oréal joined this project in 2017, to reduce carbon emissions within its supply chain of raw materials, advancing its own goal of becoming a Carbon Balanced Company by 2020. This collaboration meant more resources and expertise, enabling both companies to achieve carbon goals faster and more effectively than each would have on its own.



Location of Peat Rehabilitation in PT AMNL.

Degraded peatland is a source of emissions

Peat soil is made up of partially decomposed plant material in a water-saturated environment without oxygen¹. Thanks to this biomass, vast amounts of carbon are stored in the soil. Transforming peatlands into productive agricultural land and plantations often involves draining them of water. This process leads to degradation – microbes in the soil decay the organic matter and release CO₂ into the atmosphere, which contributes to climate change². Keeping this ground biomass to remain as carbon stock plays an important role in preventing global warming due to greenhouse gas emissions. Sustainable use of peatlands for agriculture requires careful management.

¹ [International Peatland Society](#), 2019

² [World Resources Institute](#), 2016

Drainage of the peatland and the resulting low water table also increases fire risk. In 2015, fire caused by slash and burn practices, aggravated by the El Nino effect, degraded more than 90 percent of AMNL's peatland conservation area.

How is the rehabilitation project reducing emissions?

Rehabilitation started in 2016, planned and then implemented together with L'Oréal with the help of expert partners including South Pole, Tanjung Pura University and FIELD. These were the four main components:

1. Hydrological management

Maintaining a high water level results in reduced (in an ideal case no) decomposition through oxidation and fire. The project reduces CO2 emissions by managing water levels and preventing fires through robust monitoring and rapid response. In response to the forest fires of 2015, GAR started to implement rewetting activities in the area. It identified 55 leakage points for rewetting activities in the project area, which are closely monitored.

GAR is also working with Tanjung Pura University to develop a masterplan for water management to ensure proper rewetting and revegetation.

2. Revegetation

Because peatlands are constantly exposed to air when degraded, it is difficult to maintain net neutral simply by preventing CO2 losses. We also need to boost carbon gains by increasing absorption through revegetation. Replanted trees sequester CO2. The revegetation process follows the Indonesian Peatland Restoration Agency (BRG) guidelines. At least 16 native species have been planted in an area totalling 979 hectares as of June 2020.

3. Fire prevention

The fire prevention programme involves both the company and the community. Employees of the company are trained to prepare for land fire hazards, through developing and reviewing plans for fire prevention, hotspot identification, and monitoring and prevention patrols.

Communities play a part in monitoring, preventing and helping to put out fires via the Desa Makmur Peduli Api (DMPA) fire-free village programme. DMPA offers an economic incentive to villages that do not experience any fire events for an entire year. Incentives support specific community-wide projects like infrastructure improvements. GAR also provides firefighting equipment and training for emergency response personnel to fight fires, as well as establishing paid fire patrols during the dry season.

4. Livelihood activities

Strengthening community livelihoods helps to prevent damage and encroachment into rehabilitated and conserved peatlands. We empower communities through the development of integrated sustainable agriculture. This is done through field schools and model farms, making compost and natural pesticides, pest management and intensive agriculture practices to improve production.

In combination, these efforts increase the likelihood of ongoing peatland conservation. The goal is to reduce CO2 emissions from the peatlands from 2016 to 2020 by 139,845 tonnes, and achieve carbon positive peatlands.



Community members participating in livelihood activities organised by GAR.

Why is peatland rehabilitation necessary?

Peatlands are a unique ecosystem formed through the accumulation of partially decayed vegetation and other organic matter in waterlogged and acidic conditions over thousands of years. They store tremendous amounts of carbon and are [important for the environment](#). When peatlands are drained, exposure to oxygen causes the stored carbon to be released as greenhouse gases (GHG). Drained peatland is also especially fire prone, further increasing the risk of GHG emissions.

Peatlands are also important habitats for flora and fauna. A 2015 survey of the area found over 320 flora species and significant presence of diverse fauna comprising birds, mammals and herpetofauna.

Advancing the Sustainable Development Goals (SDGs)

We measure results of the project against the UN SDGs. Besides advancing Climate Action (SDG 13) and Land Use (SDG 15) directly, we have also made inroads for goals relating to Reducing Poverty (SDG 1), Gender Equality (SDG 5) and facilitating sustainable Economic Growth (SDG 8).

| SDG | Impact | | | | | | | | | | | | | |
|--------------------------|---|------|---|------|--------|------|--------|------|--------|------|---------|------|--------------------|--|
| Climate Action SDG 13 | <table border="1"> <thead> <tr> <th data-bbox="531 1346 659 1435">Year</th> <th data-bbox="659 1346 1150 1435">Expected emissions reduction with 20% buffer (tCO_{2e})</th> </tr> </thead> <tbody> <tr> <td data-bbox="531 1435 659 1496">2016</td> <td data-bbox="659 1435 1150 1496">36,563</td> </tr> <tr> <td data-bbox="531 1496 659 1556">2017</td> <td data-bbox="659 1496 1150 1556">36,563</td> </tr> <tr> <td data-bbox="531 1556 659 1617">2018</td> <td data-bbox="659 1556 1150 1617">36,563</td> </tr> <tr> <td data-bbox="531 1617 659 1677">2019</td> <td data-bbox="659 1617 1150 1677">147,049</td> </tr> <tr> <td data-bbox="531 1677 659 1783">2020</td> <td data-bbox="659 1677 1150 1783">42,933 (estimated)</td> </tr> </tbody> </table> | Year | Expected emissions reduction with 20% buffer (tCO _{2e}) | 2016 | 36,563 | 2017 | 36,563 | 2018 | 36,563 | 2019 | 147,049 | 2020 | 42,933 (estimated) | |
| Year | Expected emissions reduction with 20% buffer (tCO _{2e}) | | | | | | | | | | | | | |
| 2016 | 36,563 | | | | | | | | | | | | | |
| 2017 | 36,563 | | | | | | | | | | | | | |
| 2018 | 36,563 | | | | | | | | | | | | | |
| 2019 | 147,049 | | | | | | | | | | | | | |
| 2020 | 42,933 (estimated) | | | | | | | | | | | | | |
| Land Use SDG 15 | <p>A total of 979 hectares of trees have been planted on peatlands as of 2020. The average survival rate is 82.3 percent</p> <p>The Petanian Ekological Terpadu (PET) programme increases productivity and crop yield through agricultural training and assistance in farming equipment and improved planting materials.</p> | | | | | | | | | | | | | |

| | |
|---|--|
| No Poverty SDG 1 Sustainable Economic Growth SDG 8 | Sustainable agriculture programmes have been implemented in eight villages. 333 people have been trained under the PET programme. Three villagers have participated in the field school programme. Families participating in the sustainable agriculture programme have increased their income by an average of about 17.9%. 85 new jobs with new skills required created in the Fire Protection, Rewetting and Replanting programmes. |
| Gender Equality SDG 5 | A total of 506 women have benefitted from skills training and increased household incomes from the implemented projects (DMPA – PET) so far. |

L'Oréal's involvement – the importance of partnership

Besides co-funding the project for four years, L'Oréal commissioned sustainability consultants South Pole to provide annual independent assessments of the carbon impact against its declared goals and targets, and FIELD in the area of community livelihoods. The consultations were beneficial to the project as they helped GAR identify gaps and possible improvements in our methods and processes.

The financial contributions made by L'Oréal also enabled GAR to scale the project up faster and expand the scope to take into account social factors contributing to deforestation and peat degradation. These include community education on fire monitoring and prevention and reducing encroachment by developing alternative means of livelihoods utilising available land without harming forests and peatlands.

Less tangible benefits of the partnership with L'Oréal include the potential of raising consumer awareness of what brands can do and are doing to eliminate or reduce negative impact on the environment. This can ultimately help consumers make informed choices.

The partnership with L'Oréal has enhanced GAR's ability and capacity to implement a conservation and rehabilitation project which takes into account the well-being and sustainable economic development of communities. The impact and results are clear and measurable. The experience with L'Oréal demonstrates that partnerships help our projects achieve and sustain positive outcomes. GAR is committed to restoring the remaining degraded area, and seeks partners to continue the work on the rehabilitation project.

Contact us on project partnership opportunities [here](#).