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MOL's Net Zero Pathway ~Our initiatives for CDR~

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MOL Group Environmental Vision 2.2 ~ Our Pathway to Net Zero Emissions~

The "Pathway to Net Zero Emissions" specifically shows reduction pathways for achieving net zero by 2050. This time, we enhanced the resolution to visualize the degree of contribution of each action. By doing so, we present the transition plan for the MOL Group to achieve net zero more clearly .

MOL Group's Pathway to Net Zero GHG Emissions



*1 Scope: MOL and all consolidated subsidiaries. Scope 3 emissions are also included in the 2050 net zero target.

*2 For the calculation of emissions for years prior to the target year of 2050, emissions will not be offset with carbon dioxide removal. See the Appendix (=P.45) for details.

Our Commitment to Carbon Dioxide Removal ~ The importance of Beyond Value Chain Mitigation~

- In addition to reducing emissions from the value chain, including MOL, we engage with CDR to contribute to the mitigation actions beyond the value chain (BVCM*1).
- In order for society as a whole to achieve net zero, CDR needs to be significantly scaled. Our direct involvement in CDR ensures the neutralization of our future residual emission*² and contributes to the broader adaptation of CDR projects across our society.



MOL initiatives for carbon dioxide removal

Carbon Dioxide Removal(CDR) refers to the removal and sequestration of CO2 from the atmosphere and can be divided into two broad categories: nature-based solutions, which increase CO2 absorption by forests and other natural carbon sinks, and technology-based ones , which remove CO2 from the atmosphere using chemical/engineering technologies . We are proactively involved in both solutions . (\Rightarrow P. 30)

*1 Abbreviation of Beyond Value Chain Mitigation (⇒P.46)

*2 MOL aims to reduce those emissions to less than 10% of those of 2019, the base year. (⇒P.46)

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2 Our Commitment to Carbon Dioxide Removal ~ The milestone towards 2030~

- Given the limited remaining carbon budget, we believe it is important to engage with CDR from now, without delay, in order to support the scaling of CDR (⇒P.4).
- Therefore, we have set an interim milestone to achieve by 2030 and will promote related initiatives.



We will reduce our emissions based on the scientific abatement-curve. Additionally, we take the initiatives to contribute to the society's mitigation actions and do not use them to counter-balance our own emissions.



Our Initiatives for Carbon Dioxide Removal

Nature-based Solutions

By supporting projects such as forest and mangrove restoration, we will contribute not only to decarbonization but also to other co-benefits, such as the protection of biodiversity and the improvement of livelihood of local communities.

Mangrove Restoration & Conservation Project



Since January 2022, we have been participating in a blue carbon project aimed at restoring and conserving mangroves in South Sumatra, Indonesia. The project aims to reduce CO2 emissions by about 5 million tons through forest conservation activities and to absorb/store another 6 million tons of CO2 through afforestation of mangroves and other plants on about 9,500ha of bare land in the next three decades.



Technology-based Solutions

By engaging with CO2 removal technology projects now, we will contribute to innovation and cost reduction of underfunded elements of nascent technologies.

Effort to scale up and catalyze the market



In May 2022, we participated in the NextGen CDR Facility, which aims to proliferate and promote carbon removal technologies, as a founding buyer. We are committed to purchasing at least 50,000 tons of CO2 removals utilizing CDR technologies by 2030.



4 MOL Switch ~ Leveraging the power of Investment ~

MOL has established "MOL Switch" in the USA to invest in startups developing technologies and business models in the energy sector that help decarbonize MOL group and society. MOL Switch will invest USD 100 million in total over the next 3 years.



