

WATER RISK

In addition to the risks posed by climate change, Pupuk Kaltim also recognizes that this has led to unpredictable weather patterns and seasons. Although Pupuk Kaltim is not located in an area prone to water scarcity, it still strives to manage water wisely as part of its contribution to reducing the impact of water risk. As a further effort in water management, Pupuk Kaltim has implemented desalination to convert seawater into freshwater that can be used for production needs. Furthermore, Pupuk Kaltim has also conducted a risk analysis related to the use of groundwater.

The water-related risks identified by Pupuk Kaltim are as follows:

1. Dependence on deep groundwater for its supporting facilities, even though deep groundwater is limited in quantity and its extraction is restricted by the government. To mitigate this risk, Pupuk Kaltim is working to reduce its dependence on groundwater, including through the use of rainwater for toilet flushing in offices and the use of air conditioner condensation water as a source of clean water in offices.
2. As we know, increased water consumption causes a risk of decline in the quantity and quality of fresh water. A decline in the quantity and quality of fresh water can indirectly reduce the availability of clean water from nature. Therefore, to mitigate this, the company has created a tree planting program and maintains forests in the company area to increase the absorption of rainwater and surface water into the ground. Forests with good ecosystems naturally purify surface water.
3. There is a risk of limited freshwater supplies, while the demand for water is predicted to increase in the future. To mitigate this risk, water storage ponds are being built to store surface water so that it can be used as freshwater in industrial support areas.
4. There is a risk of declining water quality in the future. To mitigate this risk, Pupuk Kaltim is making efforts to ensure that the level of pollutants in wastewater discharged into the environment does not exceed the thresholds set by the government;
5. There is a risk of increased groundwater demand for domestic use in the buffer zone due to population growth around the industry. To mitigate this risk, provides Corporate Social Responsibility (CSR) assistance in the form of raw water to the surrounding community.
6. The government has restricted the issuance of Groundwater Utilization Permits (SIPA), even though the Company's demand for fresh water has increased. Meanwhile, producing water from seawater requires significant costs and energy per m³ of fresh water produced. In response to this risk, Pupuk Kaltim has developed a water efficiency program and built rainwater storage ponds to be used as industrial water.
7. Excessive fertilization can potentially cause environmental impacts. Excessive phosphorus nutrients can potentially be carried away in groundwater movement. Under certain conditions, this can cause eutrophication due to excessive phosphorus nutrients in the water. To address the challenges of climate change by viewing it as an opportunity for product development to increase revenue, Pupuk Kaltim has developed and implemented PreciPalm in oil palm plantations in various regions of Indonesia. Through actual and precise satellite image-based fertilizer dosage commendations, PreciPalm ensures targeted and efficient fertilizer dosage recommendations, while preventing over-fertilization and mitigating environmental impacts