Climate Risk Assessment

Identification of climate-related risks and opportunities

Telkom identifies climate-related risks and opportunities for two categories, namely physical and transition risks, assessed over short-term (next 5 years), medium-term (5–15 years), and long-term (beyond 15 years) horizons. The methodology for identifying these risks and opportunities is detailed in the 2023 Climate Risk Report.

Physical [R] risks:

1. Acute:
   - [R] Increased intensity and frequency of extreme rainfall that may cause flooding.
   - [R] Increased intensity and frequency of cyclones that may disrupt company operations.
   - [R] Increased frequency of forest fires that may disrupt company operations.
   - [R] Increased heatwave frequency that may disrupt company operations.
2. Chronic:
   - [R] Rising temperatures, leading to asset damage, infrastructure degradation, and decreased productivity of field workers.
   - [R] Increased rainfall that may cause flood.
   - [R] Rising sea levels that may lead to infrastructure damage.
   - [R] Increased drought that may disrupt company operations.

Transition risks [R] and opportunities [O]:

1. Policy and legal: [R/O] An increase in carbon prices driven by increasingly stringent carbon tax regulations to encourage decarbonization.
2. Technology: [O] Use of renewable energy to reduce emissions and optimize operational costs; [O] Technological developments to drive energy efficiency.
3. Market: [R/O] Increased energy and electricity costs from rising supply chain energy tariffs; [R/O] Increasing demand for ecological/climate-friendly products from consumers.
4. Reputation: [R/O] Reputational impact based on company's success or inability to meet stakeholder expectations of climate action.

Climate scenario analysis

In 2023, Telkom conducted a climate scenario analysis focusing on extreme rainfall and temperature rise to assess exposure risks to land and building assets. The analysis employed Shared Socioeconomic Pathways (SSP) scenarios SSP1-2.6 and SSP5-8.5 from the Intergovernmental Panel on Climate Change (IPCC) for physical climate risks and utilized the Network for Greening the Financial System (NGFS) Current Policy and Net Zero scenarios for transition risks. A subsequent analysis in 2024 expanded asset mapping to identify locations in disaster-prone areas, referencing the 2023 Indonesian Disaster Risk Index issued by the National Disaster Management Agency (BNPB). This enhanced analysis supports Telkom prioritization of at-risk areas for adaptation measures. The results of this process are shown in the two images below.