

EBRD COVID-19 Resilience Framework - Environmental and Social Assessment Training Programme

Module 7 – Typical environmental and social risks for the electrical supply and distribution sector

Introduction

The purpose of Module 7 is to provide a summary of typical environmental and social risks that may need to be assessed for a Project within the electrical supply and distribution sector. It should be noted that these are just examples of potential risks and the consultants will need to use their professional judgement and knowledge of the sector to identify specific risks on each given Project.

Electrical supply and distribution sector

- Impacts to biodiversity from land clearance activities leading to habitat loss, degradation, fragmentation, and species displacement.
- The alteration of terrestrial habitat from the clearance of land to provide a right of way for electrical transmission lines and substation equipment. This is particularly important to consider if the right of way passes through forested areas which could alter terrestrial habitat, bird, and bat species, and increase the risk of forest fires.
- The alteration of aquatic habitats through the installation of power transmission lines that cross wetlands, watercourses, and require the removal of riparian vegetation. Construction works near (or within) watercourses may also generate increased soil erosion and water turbidity.
- Impacts to biodiversity from collisions by birds and bats with electrical transmission lines leading to injury and mortality.
- The generation of electromagnetic interference and radiation, leading to increased mental stress and impacts to human health.
- Increased health and safety risk to the workforce from exposure to high-voltage equipment and transmission lines.
- The presence of hazardous materials (such as oils, fuels and Polychlorinated Biphenyls (PCBs)) within old electrical equipment which could result in contamination of soil and groundwater, and exposure to workers and local communities.
- The potential for workers to be exposed to hazardous substances including pesticides used to clear vegetation from right of ways, during their storage, handling and application using spraying or other types of equipment.
- The potential for soil and groundwater contamination to occur from the inappropriate disposal of empty pesticides containers, which contain residual quantities of hazardous substances.
- Increased risk to community health and safety arising from the transportation of large and heavy loads using vehicles on the public road network.