



Djermaya photovoltaic plant Geotechnical study of the project



Highlights100 ha site
200.000 solar panels





The Project

Chad is a country where the climatic conditions are particularly favourable for the operation of solar power plants.

At the request of the COMPAGNIE DES ÉNERGIES NOUVELLES and a consortium of developers, TERRASOL has conducted a preliminary geotechnical study for a solar photovoltaic power plant project at Djermaya (about 30 km north of N'Djamena). SETEC HYDRATEC also worked in parallel on a study of the hydraulic conditions of the project.

The 100 ha site is a rough square with 1 kilometre side, partially located in a flood-prone area. The project is planned to comprise 200,000 solar panels (72-cell each) totalling 60 MW installed power. It will use the single-axis solar tracker technology.

Our Services

After a site visit, the TERRASOL assignment consisted in defining and following up a geotechnical investigation programme. The programme was implemented by a Chad firm (LAGEMOT), which TERRASOL placed in direct contact with the plant operator consortium.

The geotechnical study enabled to define the foundation conditions for the steerable panels (driven piles), the earthworks conditions (fill re-use, compacting, general levelling) and the site hydraulics/drainage principles.

Key features

- Definition and follow-up of the geotechnical investigation program
- Site visit
- o Definition of the foundations for the solar panels
- o Definition of the earthworks conditions
- Hydraulics/drainage of the site