energy + power

project name	Khartoum New International Airport (KNIA)	
	power and ch	illed water design
owner	Project Implementation Unit for KNIA, Khartoum (Sudan)	
prime consultant	Dorsch Consult Airports, Munich (Germany)	
location	Khartoum (Sudan)	
project duration	begin	october 2003
	end	december 2008

The airport of Khartoum is located close to city center and represents a permanent peril. Possibilities for airport extension do not exist due to the centric locaton.

The Presidency and its Project Implementation Unit for KNIA plan a new Greenfield airport, for 4.5 million passengers per year, some 40 km south of Khartoum.



example cooling towers in desert area, Nevada (U.S.A.)

## responsibilities

power supply relevant contribution to airport site selection

master planning, design, specification writing for chilled water supply and tri-generation (combined power-heat-cold generation) system:
chilled water generation: absorption and compression chillers, total 18 MW<sub>Cold</sub> (61 MMBTUH), cooling towers
chilled water distribution

master planning, design coordination, specification writing of power supply:

6 diesel engine generator sets, 1,200 kVA each
 fly wheel break load free power supply

turn key (EPC – engineering, procurement, construction) tender preparation and bid evaluation acc. to FIDIC "silver book"

