

Energy – The Power House of Punjab

The energy sector in Pakistan consists of power generation, distribution and transmission companies. Power generation is handled by Pakistan Electric Power Company (PEPCO), which is a government owned entity along with four power generation companies (GENCOs) and 30 major Independent power producers (IPPs). The Water and Power Development Authority (WAPDA), which is an autonomous and statutory body under the control of the federal government also shares the power generation function.

In addition National Transmission Distribution Company (NTDC) manages most of the energy transmission services and is divided into 10 power distribution companies (DISCOs) that include Lahore Electric Supply Company (LESCO), IESCO (Islamabad), GEPCO (Gujranwala), FESCO (Faisalabad), etc. Electric power in Pakistan comes from a variety of sources namely hydel, thermal, wind, solar, agriculture biomass and nuclear. The power generation capacity in Pakistan was 19,132 MW as of fiscal year 2015 as opposed to 18,771 MW in fiscal year 2014, showing an increase of 2%.



Punjab shows immense investment potential due to an increase in power demand by 6-8% in the previous years. In addition, almost 40% of Pakistan's total installed power capacity is located in Punjab and it consumes about 68% of the total generated electricity in the country. Punjab is the hub of various hydel, coal, solar, and biomass opportunities, which can be capitalized through investment. The government is heavily focusing on renewable energy and 'Wind Corridors' have been set up at Kallar Kahar and Rajanpur along with solar power generation zones in southern Punjab with solar irradiation of 5 to 7 Kwh/sqm/day. Quaid-e-Azam Solar Park is a notable solar power project spanning over 6,500 acres promising 17% Return on Equity (RoE) (indicative) in dollar terms i.e. protected against foreign exchange risk guaranteed for energy projects. There is crop residue of around 34 million tons per annum consisting of rice husk, rice straw, maize stalk and cotton stick etc., which offers immense opportunity for bagasse based energy generation. Moreover, there is 2,300 tons/day of solid waste from livestock in urban centers of Punjab that can be converted into energy.

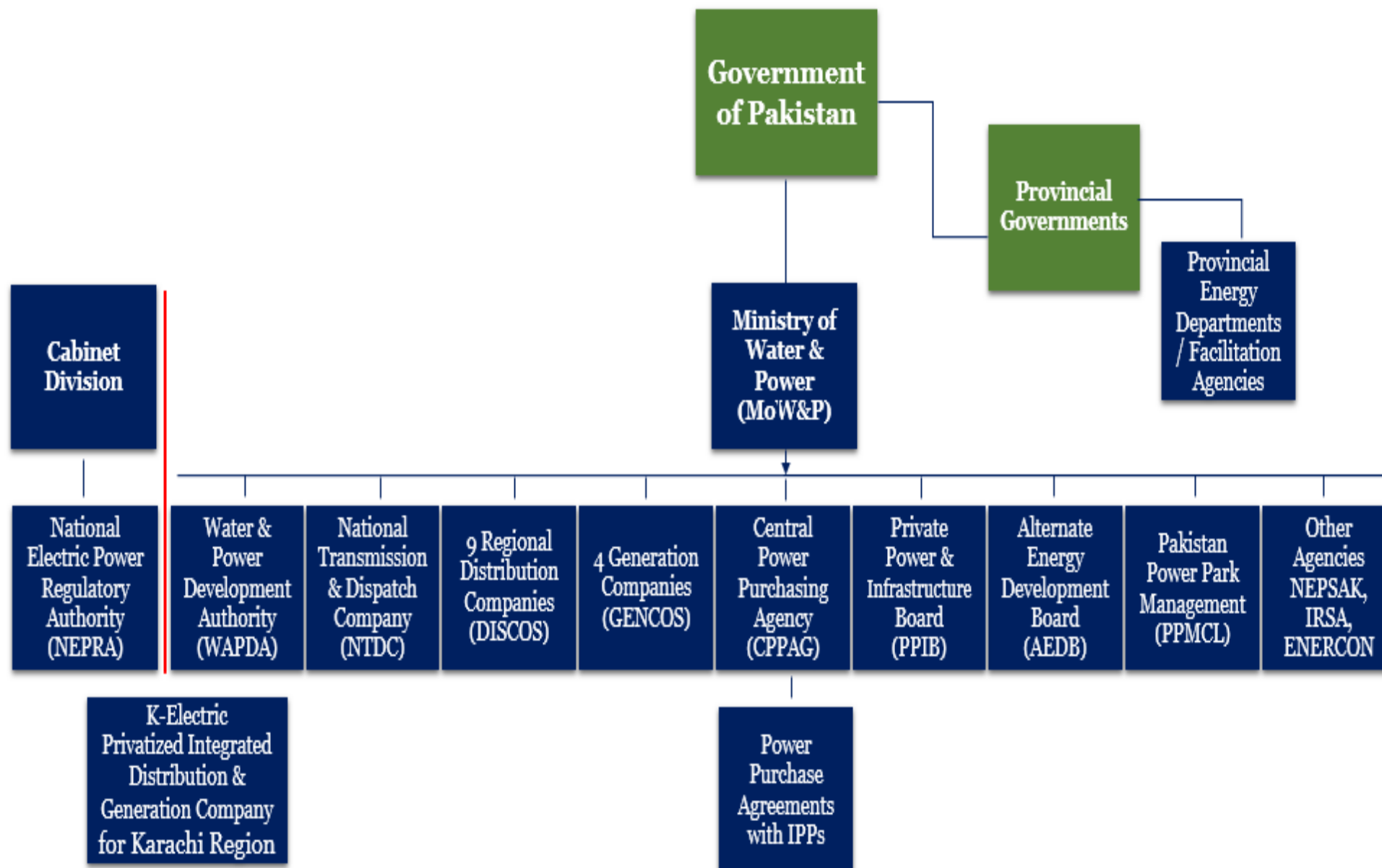


Strong Regulatory Framework

The power generation companies in Pakistan receive multiple incentives and are allowed to import plants and equipment at 5% duty (0 % for renewable energy) with exemption on sales tax along with income tax exemption for life. They also receive full repatriation of profit plus investment along with international arbitration awards enforceable under law. The hydrological risk is borne by the government and minimum 15% Return on Equity (ROE) is guaranteed (net of taxes). Multiple government organizations and agencies operate in the energy sector to overlook the smooth functioning of various activities. National Electricity and Power Regulation Authority (NEPRA) is the major regulator in the sector that ensures transparent

regulatory regime for investors to secure their investment through long-term contracts. Moreover, it grants licenses, determines tariffs and adjustments and sets performance standards. Private Power and Infrastructure Board (PPIB) works on behalf of all ministries and departments of the government of Punjab in setting up/approving power projects in the private sector. In addition, Alternation Energy Development Board works as a one-window facilitator for renewable energy projects. The Ministry of Water and Power is a parent government body responsible for water and power projects in Pakistan. Within Punjab, Punjab Power Development Board (PPDB) and Energy Department, Punjab are the key agencies involved in power projects.

Pakistan Power Sector Structure



Energy Sector Consumption

