The State of the Kyrgyz Energy Sector

June 2021
Electricity Sector Status

- **The sector is characterized by aged infrastructure and significant losses:**
  - About half of generation capacity beyond useful service life
  - Many transmission towers (built in 60s - 70s) in critical condition
  - Transmission & distribution network decay, resulting in high technical losses

- **Shortage of electricity supplies; significant potential in renewable energy:**
  - The country barely meets domestic demand and is likely to fall short of meeting export obligations in coming years
  - New generation capacity needed due to aging assets, hydrology cycles, increasing domestic demand, and opportunity for regional trade
  - Significant potential for hydropower and solar development in the country

- **Having one of the lowest residential tariffs in the world:**
  - Low tariff applied for social reasons; however, it weakens the sector as evidenced internationally
  - Electricity used for heating, resulting in high electricity consumption

**Electricity Tariff for households in 2019**

Source: ADB, Kyrgyzstan Energy Sector 2020 (lower rates applied for country with ranges)
Tariffs and Cost of Service

- No electricity and heating tariff changes since 2015.

- Residential electricity tariffs and heating tariffs are cross-subsidized;
  - Residential tariffs for consumption <700kWh apply to 54% of total consumption and cover only 41% of cost-of-service level (2020*).
  - Large residential consumers (>700kWh/month) & non-residential consumers partly compensating for residential losses with tariffs above cost of service.

- Cross-subsidies remain insufficient for full cost-recovery in either sector; and they reduce industrial competitiveness.
Cost-Recovery would deteriorate if tariff not increased

- Without change in tariffs, electricity sector is estimated to have a deficit of more than KGS 12 billion (roughly US$150 million) by 2025, assuming no new capital expenditure.
- Principal drivers:
  - Increasing debt service, made worse by recent foreign exchange depreciation
  - Inflation
  - Low export revenues dependent on multi-year hydro cycles and increasing domestic demand.

Electricity Sector Deficit Forecast (2021-2025)

Source: DHInfrastructure calculation, 2021
Sector cumulative debt remains high

- Energy sector companies’ cumulative debt reached KGS 103.3 billion. It has remained steady at a level of ca 18% of GDP since 2015 (18% of GDP in 2018, 17% of GDP in 2019).

- A rapid deterioration of the financial situation is expected because of lower electricity exports and much higher loan repayment obligations:
  - Loan repayment is scheduled to quadruple from 2018 to 2025 before plateauing, assuming no additional debt is incurred.

Source: World Bank forecast based on loan information provided by each company as 2019
Urgent need for broad sector reforms

- **Adequate, reliable and financially sustainable path for the sector**
  - Tariff reforms towards cost recovery and sector debt/fiscal burden alleviation
  - Protection for vulnerable population groups through enhanced social safety net
  - Tariff reforms accompanied by communication and outreach
  - Institutional and corporate governance strengthening

- **Expand renewable energy generation capacity – hydro along with solar and wind**
  - Further expansion of hydropower capacity
  - Diversification of generation and exploration of opportunities in solar and wind resources
  - Development of enabling renewable energy regulations and competitive procurement approaches for private investment

- **Promote energy efficiency on supply- and demand side**
  - Improving reliability and efficiency in transmission and distribution networks
  - Scaling up demand side energy efficiency, including in building, commercial and industrial sectors.
  - Creating enabling policy and regulatory framework for demand side energy efficiency
  - Expanding regional connectivity and trade (CASA-1000 Project)
Thank you