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PREPARING THE GROUND FOR SUSTAINABLE ENERGY SUBSIDY REFORM

Adequate and affordable energy supply is fundamental to economic growth, higher living standards, and social equity. In the Kyrgyz Republic, the power sector is not making the most of its abundant hydro endowment and potential for low cost generation. Even though citizens enjoy universal access to electricity, the energy sector is financially distressed and its assets antiquated. Maintaining quality services is a challenge, and state support to the sector comes at the expense of other spending priorities such as better roads, education, and other services, and deteriorating macro-stability in the face of a growing debt burden.

In 2014, as part of the Government's energy sector development strategy, the World Bank, drawing on Energy Sector Management Assistance Program (ESMAP) support, initiated a technical assistance program at the request of the Kyrgyz Ministry of Energy and Industry. The objective of the technical assistance was to support the Kyrgyz Republic in establishing an autonomous regulatory agency to improve accountability in the power and heating sectors and to put in place a sustainable,

THE KYRGYZ REPUBLIC

- Kyrgyz households enjoy some of the lowest electricity prices in the world at \$0.01 per kWh, benefiting from the country's abundant hydro resources.
- The growth in demand is outpacing supply, however, and in 2014, Kyrgyzstan went from being a net power exporter to a net importer.
- The sector is in poor financial shape with aging infrastructure, but concerns over public unrest have hampered efforts to increase prices.
- The World Bank, supported by ESMAP, is working with the regulator to develop a new Medium-Term Tariff Policy for 2018-2023, that will be adopted in Spring 2018, and under which the regulator plans to increase residential electricity tariffs.
- Apart from supporting analysis of the distributional impacts of tariff increases, ESMAP is funding communication and outreach to increase understanding in the population on why energy tariffs need to rise and to build acceptance for the new tariff policy.

transparent and equitable tariff setting methodology aimed at ensuring service quality.

In 2017, a follow-up ESMAP grant provided further support to the Kyrgyz Government in developing a shared vision of the challenges of energy sector reform, including assessing the impact of potential tariff reforms on poverty and raising awareness of the need for reform and the cost of inaction.

BACKGROUND

The Kyrgyz Republic is blessed with abundant hydro resources and its citizens enjoy universal access to power. Electricity has also been a source of additional revenue for the exchequer when produced in sufficient quantities to be exported. In 2014, however, the country went from being a net power exporter to a net importer of power, largely due to a spell of unseasonably dry weather which resulted in low hydropower generation and a gap forming between demand and supply.

Exacerbating the shortage in supply is the need for heating. The cold climate and long winters have meant that access to reliable and adequate sources of heat is essential. Although the majority of Kyrgyz households rely on traditional solid fuels (coal-fired stoves), in recent years electricity has come to increasingly be used for heating, with the result that household electricity consumption has increased significantly: a twelve percent increase in the number of residential electricity consumers from 2007 to 2016 was accompanied by a 58 percent growth in residential consumption.

Kyrgyz households enjoy some of the lowest electricity prices in the world at \$0.01 per kWh. Despite the low cost of power generated using the country's hydro resources, however, these residential tariffs are far from covering the cost of power supply. In 2016 the overall energy sector (comprising electricity and heat and hot water) revenue was 21 percent below the cost of service. (The gap was even higher, at 32 percent, in 2014 when expensive imports added to the cost.)

A major factor underlying the call for additional resources stems from the necessity to replace old and poorly-maintained assets. About 45 percent of available generation



capacity is beyond its useful service life. Aging transmission and distribution assets also exacerbate the risk of network failures. Generation assets, combined heat and power (CHP) plants and heat-only-boilers operate at 20 to 50 percent of their installed capacity, and network losses often exceed 25 percent. More than 700 transmission towers, built in the 1960s and 70s, are decrepit and in dire need of rehabilitation or replacement. Most assets in the district heating sector were commissioned 20 to 50 years ago and are also in poor condition. Energy supply reliability and quality is a major concern in winter.

THE CHALLENGE

The persistent cost recovery gap has contributed to the accumulation of debt to the state by the energy companies year after year. Given the sector's considerable need for new investment, it is unlikely that this debt would be repaid in the foreseeable future.

With the goal of reaching cost recovery in the medium-term, the Government committed to a steady increase in tariffs and predictable tariff path for heat and hot water and electricity services in the Medium-Term Tariff Policy (MTTP) adopted for 2014-17. However, the MTTP was

repeatedly revised and actual tariffs do not match the original plan. Large/non-residential users are carrying the weight of electricity tariff increases that took place from 2014 to 2016. Heat and hot water tariffs increased in 2014 and 2015 as per the MTTP, but no price increases took place in 2016 for any customer group, contrary to what was envisioned.

Efforts to reform energy tariffs over the years have failed largely over concerns about public protests. In 2010 an attempt to increase residential prices led to political unrest. Even though there was no public resistance in 2015 after tariffs were increased by 10 percent for households, the President of the country publicly walked back on agreed increases in 2016 for both heating and residential electricity tariffs on the basis that a downturn in the economy was already imposing hardship on the population.

Although electricity is cheap, it is still a concern for the poor. Spending on electricity comprises only a small percentage of households' total expenditure: between 2.3 and 2.6 percent of household spending across quintiles. But consumers' willingness to pay is limited unless there is genuine concern about resultant supply shortages – such as was the case during the winter 2014/15. The social assistance system is extensive, accounting for more than two percent of GDP. But the assistance system is poorly targeted, which further exacerbates the situation.

THE RESPONSE

To increase the transparency of the tariff setting process, in 2014 a dedicated sector regulator was set up. Among other responsibilities such as tariff setting and monitoring of quality, the regulator was tasked with increasing the understanding of citizens regarding the consequences of low electricity prices and what that entails for industry. A combination of sector reforms to improve service quality and outreach to citizens to build confidence in the sector was implemented by the donor community.

Recognizing that tariff increases would be needed, follow-up support from ESMAP approved in 2017 targeted three areas:

- Technical assistance to the energy sector regulator;
- Capacity-building for poverty and social impact analysis;
- Communications and outreach to build public trust for tariff reforms.

The technical assistance involves a multi-sector approach intended to fill regulatory gaps while addressing public concerns and ensuring that the impact of reforms on the poor is mitigated. The team has conducted qualitative and quantitative assessments of existing social assistance programs to develop recommendations on mitigation measures for the poor and to inform the design of tariff reforms. Consultations with key stakeholders, including the government, regulator, and energy companies, are ongoing and a public outreach campaign has been launched, aimed at generating confidence in the sector as a starting point for reform.

The team is supporting the regulator to develop a new MTTP 2018-2023, to be adopted in Spring 2018, with the objective of increasing residential electricity tariffs for the first time since 2015. Since this is politically sensitive, a communications strategy has been launched by sector



institutions, explaining the underlying reasons for tariff reform. A media firm has been hired for preparation of communications material targeting the government and external audiences, and is making extensive use of social media in addition to traditional platforms such as media outlets.

The ESMAP technical assistance is complemented by the full range of World Bank activities in the energy sector. The Bank's engagement in the sector through investment project financing, development policy operations, analytical and advisory activities and policy dialogue have created the groundwork for a robust partnership with the government. Efforts have also been made to align this work with that of other donors working in the energy sector and to inform them about the findings of the analytical work. Collaboration with the ADB in 2018 will ensure nation-wide outreach to the population affected by tariff reforms. The World Bank Poverty team, which is leading the capacity building program financed by ESMAP on evaluating the impacts of tariff reform, has brought together participants from a range of government ministries and agencies, including the Ministry of Economy, Ministry of Finance, Ministry of Social Protection, State Regulatory Agency, Statistical Office and the National Bank. The team is also building

technical capacity in the analysis of household data and holding training courses to increase knowledge about the reform and provide the basis for a factual assessment of the impact on different household groups.

MOVING FORWARD

Following through on tariff reform will require sustained government commitment and continuous World Bank support to successfully adopt the 2018-2023 medium-term tariff policy when it is issued. The Bank team recognizes that it is necessary to continue the engagement on enhancing the financial sustainability of the energy sector and to ensure targeted support to the poor while reaching out to the public to build trust and enhance understanding of the rationale for tariff reforms.

ESMAP's \$20 million Energy Subsidy Reform Facility (ESRF) was set up in 2013 to help countries remove fossil fuel subsidies while protecting the poor. ESRF provides technical assistance to governments, develops tools for assessment and decision-making, and facilitates knowledge-exchange for a global community of reformers.

ABOUT ESMAP

The Energy Sector Management Assistance Program (ESMAP) is a global knowledge and technical assistance program administered by the World Bank. It provides analytical and advisory services to low- and middle-income countries to increase their know-how and institutional capacity to achieve environmentally sustainable energy solutions for poverty reduction and economic growth. ESMAP is funded by Australia, Austria, Denmark, the European Commission, Finland, France, Germany, Iceland, Italy, Japan, Lithuania, Luxembourg, the Netherlands, Norway, the Rockefeller Foundation, Sweden, Switzerland, and the United Kingdom, as well as the World Bank.

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