

Quarterly Energy Monitor

Electricity subsidies in Pakistan:

How the government is phasing them out under pressure from the IMF?

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Introduction

The incumbent government in Pakistan has been struggling to avert financial bankruptcy. The declining financial health indicators loom over the country's economy as well as purchasing power of the common citizen. Country's inflation has broken the common man's back as inflation surged to a new high of 27.3% in August 2022 - the highest since 1973. The year on year inflation in September has climbed up to 23.2% in 2022, as compared to 9% last year.[20]

Pakistan's net liquid foreign exchange reserves with the State Bank of Pakistan (SBP) also paint a bleak picture. In a year, the reserves dropped from USD 19.25 billion to USD 7.88 billion in September 2022.[25] The external debt servicing need stood at USD 4.09 billion for April – June 2022, cumulative balance of trade (net imports) stood at USD 8.424 billion by the end of September 2022, and net imports for the month of September marked USD 2.321 billion. [26, 27] The bleak state of Pakistan's liquid foreign exchange reserves has been insufficient to meet its external debt servicing obligations as well as pay the import bill.

The International Monetary Fund (IMF) came as the 'savior' in these difficult times, as its executive board approved the Extended Fund Facility¹ (EFF) after conducting the 7th and 8th review. The board approved funds amounting to approximately USD 1.177 billion (equivalent of 894 million Special Drawing Rights) as well as unlocked the potential to obtain foreign financing from other international financial institutes.

The IMF's assistance through Extended Fund Facility, however, has come with certain preconditions. Since the approval of the EFF program, the government is on a tight leash in terms of its spending. The government also has to implement corrective policies to turn the balance of payments positive. The approval specifically has asserted for steadfast implementation of budget for financial year 2023, continuation of market-determined exchange rate, and a proactive and prudent monetary policy, while expanding the social safety measures to protect the vulnerable. [7]

One of these measures are removal of electricity subsidies to create the necessary fiscal space. This measure is asserted despite the global energy supply setbacks and the soaring fuel costs for electricity production. In March 2022, the government announced a relief package for end consumers amounting to PKR 106 billion as a tariff differential subsidy. But this was discontinued in June 2022. On top of that, the average price of a unit (adjusted for actual fuel cost) for an end consumer was hiked to PKR 35/kWh for 0 – 300 units slab, PKR 37/kWh for 300 – 500 units, and PKR 39.5/kWh for units above 500.

In such a situation, the withdrawal of electricity subsidy created a severe impact on power consumers as the actual cost of electricity is not affordable for vulnerable sections of society. Their continuation also poses challenges for a government with a narrow fiscal space.

¹ The EFF provides assistance to countries experiencing serious payment imbalances because of structural impediments or slow growth and an inherently weak balance-of-payments position. [6]

In this issue of quarterly energy monitor, we discuss electricity subsidies in detail, their financial and economic implications, and alternative options to protect the vulnerable communities from price shocks.

What is electricity subsidy?

Electricity subsidy — which is one of the forms of energy subsidy — is a deliberate policy action taken by the government to reduce the cost of electricity for power consumers. This is essentially a support mechanism extended by the government to provide relief to the end consumers. Under such support mechanism, the government makes up for the gap between the actual price of electricity and the price to be borne by the end consumers. So, it is a direct budgetary payment (or expenditure) — a potential liability for the budget whenever it is announced.

Expensive power generation and need for subsidy

Although provision of subsidies has a political appeal, the need to provide electricity subsidy is directly related to the cost of power generation. In Pakistan, there are multiple factors that render the cost of electricity production higher for an end consumer. Increasing cost of fuels for power production and power production based on imported fossil fuels are among these price hiking factors. These factors have caused exorbitant prices of electricity recently as global supply chain of fossil fuels has been impacted by ongoing war between Ukraine and Russia.

For Pakistan, following factors have generally played a precarious role in increasing the cost of electricity:

- 61% of installed generation capacity is thermal (dependent on fossil fuels such as gas, coal, furnace oil and diesel oil)
- 42% of installed generation capacity is producing electricity from imported fossil fuels
- Cashflow mismanagement and shortfall in the power supply chain
- High technical and non-technical losses in power transmission
- Cost and time overruns in mega power projects

The expensive power generation is further reflected in our ballooning circular debt, which has crossed PKR 2.476 trillion. Circular debt, created by unmet financial obligations in the power sector supply chain in a timely manner, hampers the financial sustainability of the sector. Additionally, if the announced subsidies are not timely paid, this adds to the inflating circular debt. Currently, the circular debt is equivalent to 3.8% of Pakistan's Gross Domestic Production (GDP), thereby representing 5.6% of government's debt. It is estimated that if left unchecked, this circular debt will rise to PKR 4 trillion by 2025.[16],[1] Unpaid and unbudgeted subsidies, interest charges paid on delayed payments to the power generation companies, and interest

charges on borrowings of Power Holding Limited², all contribute to an increase in circular debt on yearly basis.

Figure 1 below reveals that the unpaid subsidies as well as unbudgeted subsidies have significantly added to the flow of circular debt in the past three years among other factors. The stock of circular debt in turn has been increasing over the years as shown in Figure 2, and is expected to reach PKR 4 trillion by year 2025.

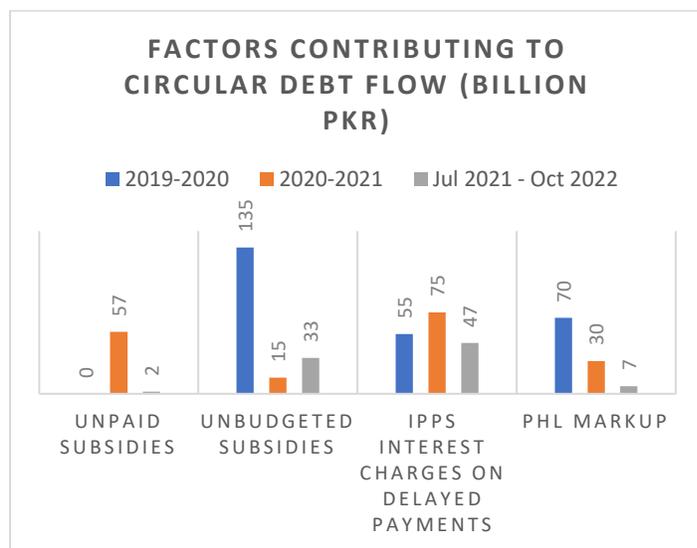


Figure 1: Factors contributing to circular debt

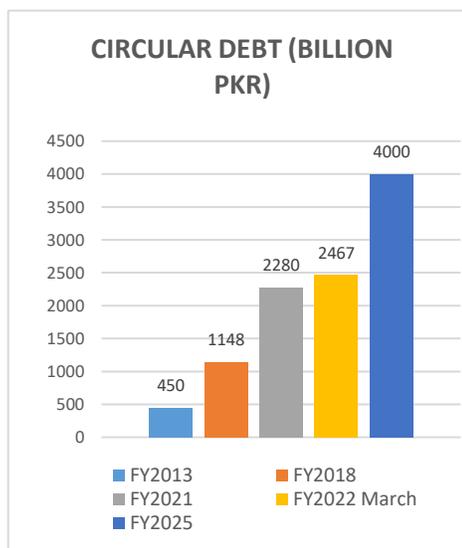


Figure 2: Circular debt by year

Source: State of Industry Report 2022, Pakistan Economic Survey 2020-2021, SBP Annual Report 2013-2014

In 2022, the cost of electricity has been consistently increasing owing to the increasing fuel prices, as shown in figure 3. The fuel prices are also almost double to what they were in respective months in 2021 as can be seen in figure 4.

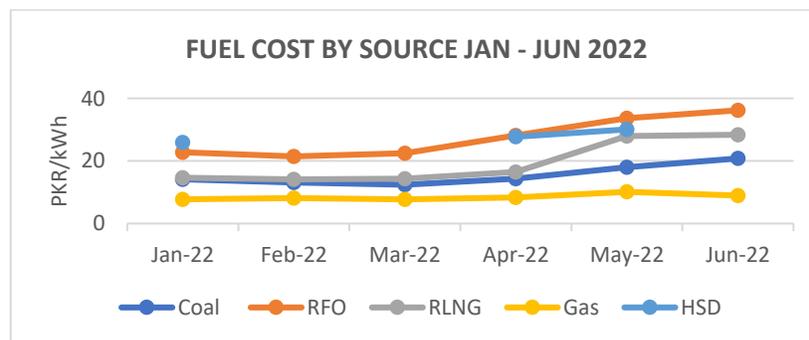


Figure 3: Fuel cost Jan 2022 - Jun 2022

Source: NEPRA Fuel Cost Adjustment Notifications

² Power Holding Limited, a company established in 2009, is under the administrative control of Ministry of Energy (Power Division) and is wholly owned by the Government of Pakistan. Its purpose is to arrange funds to meet power sector liabilities through borrowings from the financial institutions.

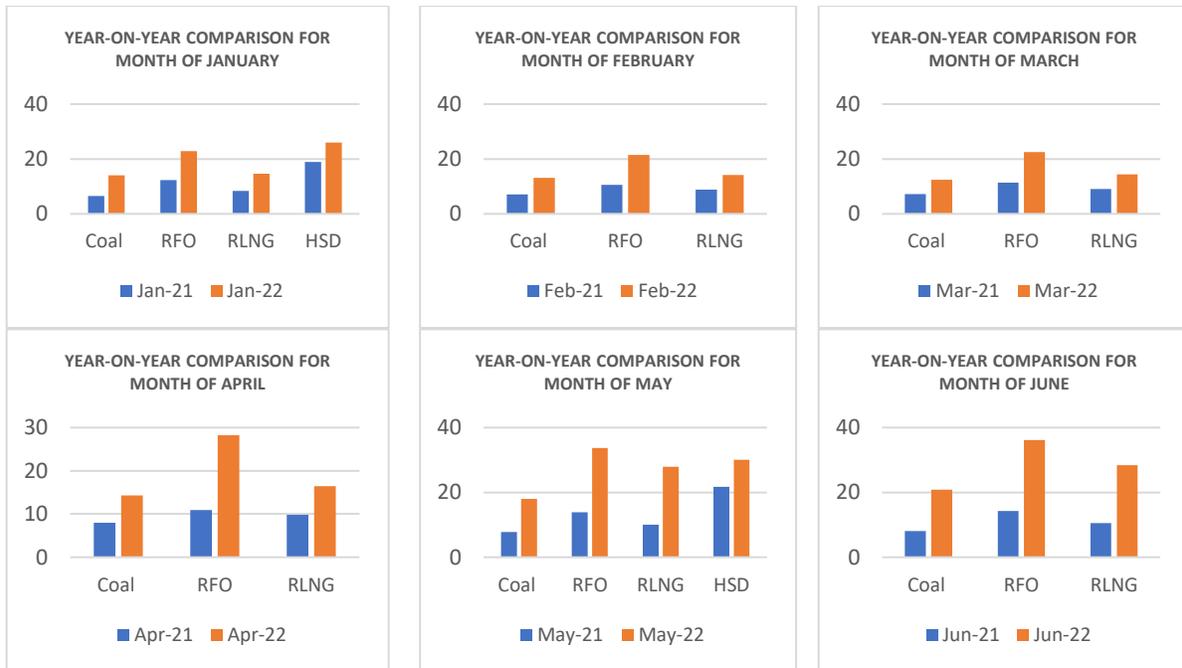


Figure 4: Year on year fuel cost comparison

Source: NEPRA Fuel Cost Adjustment Notifications

The increasing fuel prices result in fuel cost adjustments (FCA) in the tariffs determined for distribution companies. In June 2022, such adjustment has been as high as PKR 9.8972/kWh and it was all passed on to the end consumers except for protected lifeline category consumers, who consume up to 100 units of electricity per month. Overall the electricity prices with FCA are becoming unbearable for a common citizen and the absence of subsidies could aggravate crisis further in an inflationary environment. The provision of subsidies, thus appears to be a solution to provide relief to end consumers, however a deeper understanding is needed to fully comprehend its implications.

Impact of electricity subsidies on energy sector and economy

On economic front, the provision of tariff subsidies started to pose challenges for the power sector in the first decade of 2000s. Between November 2003 to February 2007, the end consumer tariffs remained unchanged although the power distribution companies (DISCOs) requested upward revision in tariffs. This implied that the cost of electricity sold was not being recouped by DISCOs and their financial position was experiencing decline. So, in February 2007, NEPRA allowed an increase in tariff to recover the rising power purchase price. But the government, in turn, allowed only partial increase in the tariff and provided a tariff deferential subsidy (TDS) to avoid burdening the end consumers. However, on the power generation end, the tariffs were increasing and since the government does not participate in tariff setting at this stage of supply chain, the gap began to emerge between the cost of production and end consumers' electricity tariff. [1]

The rising fuel prices and depreciating rupee against US dollar were contributing towards the increasing generation end tariffs. In 2013-2014, the government of Pakistan provided PKR 3.75 per unit subsidy on electricity consumption. The actual average cost of generation per unit was PKR 14.95 and the tariff offered to all consumers was PKR 11.21, while households were getting subsidized tariff of PKR 8.66 per unit against NEPRA determined tariff of PKR 13.76. The tariffs were increased in 2014, but only for productive sectors i.e. commercial and industrial consumers.

Pakistan Electric Power Company (PEPCO) was established in 1998 as a holding company under Ministry of Water and Power to assist corporatization of Water and Power Development Authority (WAPDA). It was later vested with the responsibility of effective monitoring and performance evaluation of DISCOs. PEPCO — now discontinued — addressed cashflow problems faced by DISCOs, particularly when announced subsidies were not fully or partially paid in time. So from June 2006, it started borrowing money from banks to compensate the non-receipt of subsidy payments from the government.[1] This stop gap debt introducing arrangement only increased the financial burden on the sector. The debt taken filled the immediate financial gap, but repayment along with interest and rupee depreciation increased the future financial obligation. This is evident from the huge volume of circular debt today.

The problem further lies in the low recovery rates of DISCOs besides the unrealistically low consumer end tariffs. Resultantly the released subsidy amounts have been higher than the allocated budgets. In 2009, the announced power subsidy was PKR 109.173 billion, which rose to PKR 346 billion in year 2011 (see Figure 5). In 2010, government allotted PKR 55 million in budget to cover the power sector subsidies but disbursed amount is 1.5 times of the allocated budget.

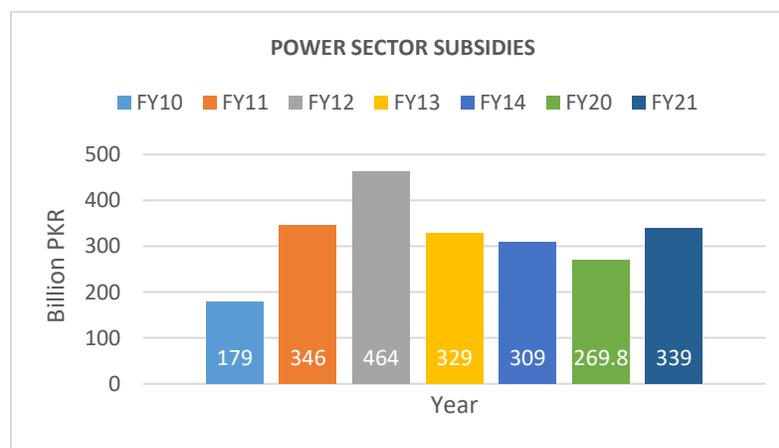


Figure 5: Power sector subsidies by year

Source: <http://lahoreschoolofeconomics.edu.pk/EconomicsJournal/Journals/Volume%2015/Issue%20SP/04%20Syed%20Sajid%20EDITED%20TTC%2011-10-10.pdf>

Electricity subsidies have different financial implications for different stakeholders. They help reducing the cost of electricity for the end consumers. For the government, the fiscal burden

increases as it has to pay for the subsidies from the budget. For the energy sector, it creates a financial burden in the form of circular debt, as most of the times the announced subsidies are not paid in time, which multiplies the circular debt. Furthermore, the sector becomes financially dependent on external financial assistance, leaving less incentive to address the inefficiencies, reduce transmission and distribution losses, and move away from expensive power generation.

IMF rationale for ending electricity subsidies

Pakistan has been in a state of economic emergency since long. The preference of short-term reforms over long-term sustainability has costed the country heavily in the form of public debt currently accounting for over 70% of GDP. The year by year increasing fiscal deficit currently stands at an average of PKR 4 trillion and is estimated to be around PKR 4.547 trillion for fiscal year 2022-2023.[2] The government’s expenditure on subsidies has been consistently increasing, with allocation to electricity subsidies amounting to PKR 481 billion in fiscal year 2021-2022. The tax-to-GDP ratio³ has been consistently low hovering around 9% over the years (see figure 7) resulting in need for external financing.

Moreover, the external shocks in the form of Covid-19, the ongoing Ukraine-Russia war and commodity super cycles⁴ have also worsened Pakistan’s economic situation. [2] Pakistan reached out to IMF in April 2019 for IMF’s Extended Fund Facility through which financial assistance is provided along with comprehensive plan to implement policies to correct the structural imbalances.

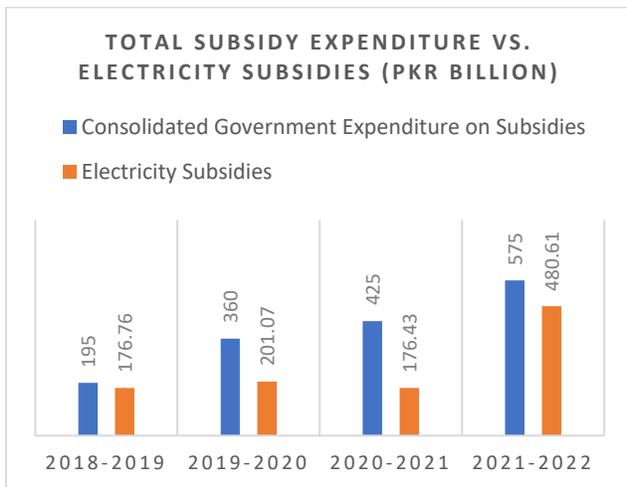


Figure 6: Electricity Subsidies vs. Total Government Expenditure on Subsidies

Source: State of Industry Report, Medium Term Budget Strategy Paper

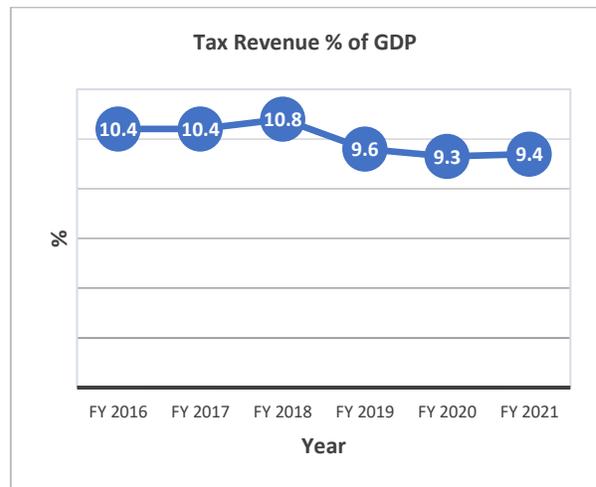


Figure 7: Tax-to-GDP ratio

Source: Medium Term Budget Strategy Paper

³ The tax-to-GDP ratio is the real index for measuring tax compliance, capacity, and efficiency in the tax system.

⁴ An extended period of boom and bust in the commodities markets, with prices falling significantly above or below their long-term trends. These movements may even outlast the business cycle and typically persist for well over a decade. [21]

Pakistan availed the facility with conditions in place to bring economic stability by reducing reliance on public debt and creating fiscal space. IMF proposed measures such as fiscal consolidation, a tight monetary policy to reduce the inflationary pressure, a market determined exchange rate, an improved balance of payments⁵ and a financially independent power sector, so that there is financial sustainability. Pakistan's sector reforms are at the core of these economic reforms, as sector faces plethora of structural problems including circular debt, low bill recoveries, weak performing DISCOs, expensive power generation, reliance on budget for financial gaps. The government's consistently increasing expenditure on subsidies, therefore, has come under scrutiny and is considered as a crippling move for power sector's sustainability. As the 7th and 8th review was carried out in first half of 2022, the withdrawal of subsidies has been mandated for continuation of the program.

Power sector far from cost recovery

Pakistan's power sector, which is operating far from cost recovery and has been a frequent receiver of major chunk of subsidies, is expected to be hit hard by the policy reforms. There is a balance of liabilities in the form of circular debt that lingers on with the sector from previous years and it is increasing on monthly basis to fund the current financial needs. Additionally, the amount that is recovered from end consumers through electricity bills is not reflective of true electricity production cost. Bill recovery is also less than 98% on average for all DISCOs, and 70% for weak performing DISCOs⁶. [13] Moreover, capacity payments have to be paid to the power generators operating on 'take or pay' basis, which become more burdensome when the power plants operated by them are underutilized because of fuel unavailability or constraints/defects in the transmission evacuation infrastructure. The continuation of subsidies for the power sector is thus not sustainable, but their abrupt removal is also not a just solution when we consider the beneficiaries of subsidies. As per the latest State of Industry Report, about 87% of the end consumers are domestic, followed by commercial, industrial, and agriculture consumers. Domestic residential consumers' consumption of electricity is also higher among the user categories.

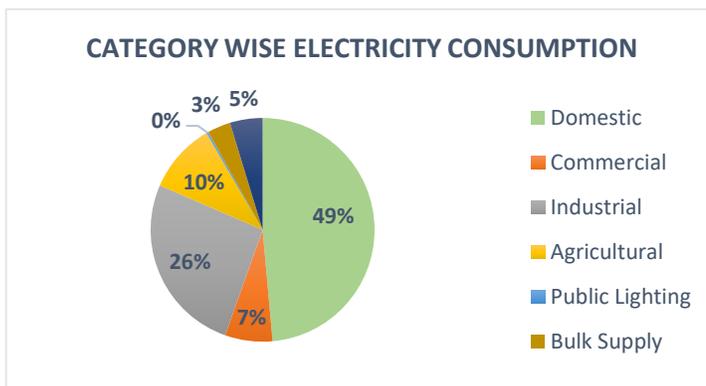


Figure 8: Category wise electricity consumption 2021 -2022

Source: State of Industry Report 2021-2022

⁵ Balance of payments is a statement of all transactions made between entities in one country and the rest of the world over a defined period. <https://www.investopedia.com/terms/b/bop.asp>

⁶ Haiderabad Electric Supply Company recovery rate 76.7%, Sukkar Electric Supply Company recovery rate 64.7%, and Quetta Electric Supply Company recovery rate 39.8% <https://www.nepra.org.pk/Standards/2022/NEPRA%20PER%202021%20Distribution%20Companies%20.pdf>

In June 2021, as part of the subsidy reforms package, the end consumer categories in DISCOs tariffs were modified in order to provide the maximum benefit of subsidies to the poorest electricity consumers. The table provided below reflects the modified tariff categories for residential consumers, which is based on terms agreed under the first out of three phases of subsidy reforms approved by the federal government. In the first phase of subsidy reform, the objective is stated to be the identification of vulnerable residential consumers based on their electricity consumption.[14] By the end of third phase of subsidy reform, the target is to base subsidies on socioeconomic status rather than electricity consumption. [14]

Table 1: Structure of Tariff of domestic non – Time of User consumers [14]

		Tariff Categories	Explanation
Protected Consumers	I	Up to 50 units – Life Line	Life line consumers will have maximum of last twelve months and current month's consumption ≤ 100 units.
	li		
		51 to 100 units – Life Line	
<i>[These consumers will be protected from price increases fully or partially]</i>	lii	001 – 100 units	Include consumers consuming <200 kWh per month consistently for the past 6 months.
	lv	101 – 200 units	
Un-protected Consumers	V	001 – 100 units	These consumers will get benefits of only one previous slab, with the slab rates of 201 – 300 be used for previous slab benefit up to 300 units.
	Vi	101 – 200 units	
	vii	201 – 300 units	
	viii	301 – 400 units	
	lx	401 – 500 units	
	X	501 – 600 units	
	Xi	601 – 700 units	
	xii	Above 700 units	

Under the revised structure, the protected end consumers are getting subsidized electricity rates. The electricity rates they face are also not subject to fuel cost adjustments as a regular residential consumer gets. Over and above this, government often announces subsidies for regular residential, commercial and industrial consumers. For example, in March 2022 a relief package was announced for end consumers in which consumer bill was reduced by PKR 5/kWh for commercial consumers having less than 5kW load and non-time of use residential consumers except life line consumers⁷. But later this package was discontinued from June 2022. [12] Similarly in July, a relief program was announced to provide free electricity to households consuming up to 100 units of electricity per month, but later suspended. Figure 7 below shows the amounts announced and paid for various subsidy packages that are introduced over previous years.

⁷ Lifeline protected consumers already pay for electricity at subsidized rates.

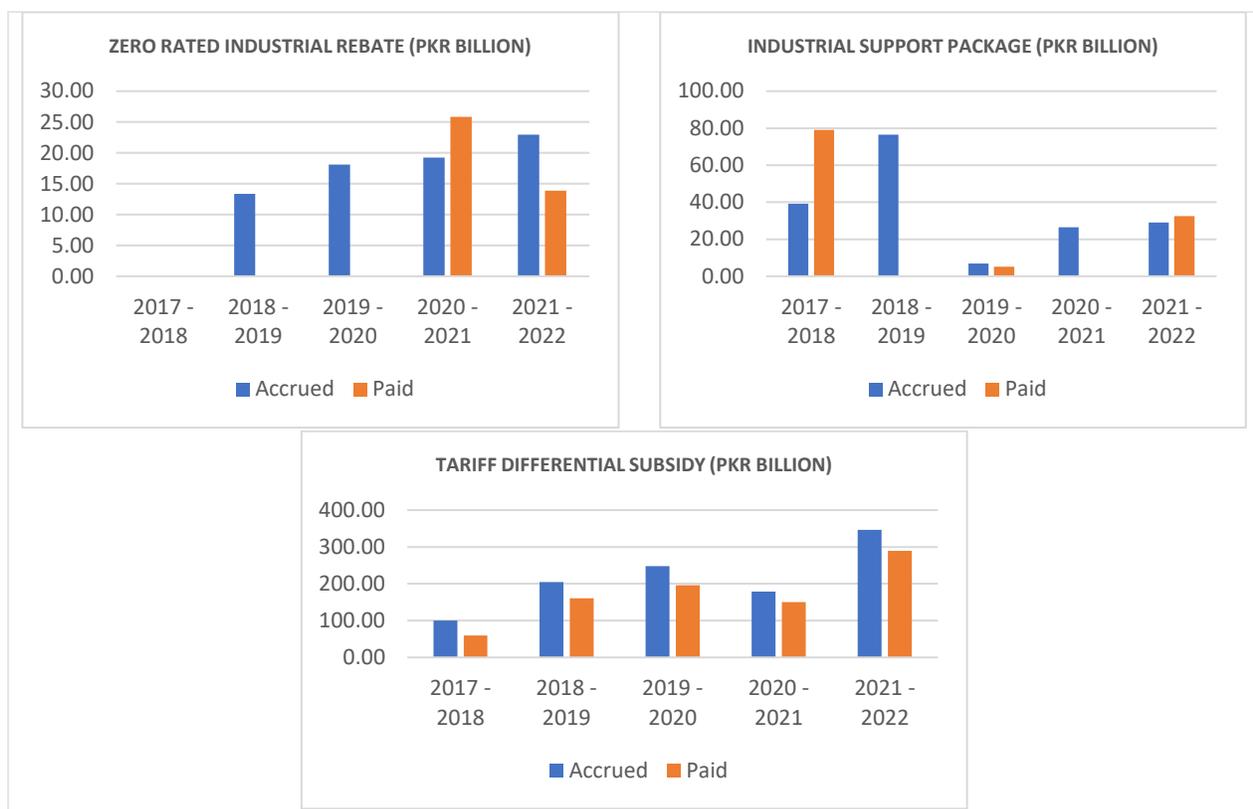


Figure 9: Subsidy packages for end consumers

Source: State of Industry Report 2022

Discontinuation of subsidies will have a direct impact on vulnerable consumers, especially because of high energy prices and weakening purchasing power. The subsidized rates are already being provided to consumers with low electricity consumption. As per the Household Integrated Economic Survey (HIES) 2018 – 2019, out of the bottom 40% of the households, 75% are consuming only more than 50 units of electricity, 46.7% households are consuming more than 100 units and only 8.1% households are consuming more than 200 units of electricity per month.[14] Moreover, according to HIES 2018 – 2019, of the household expenditure on fuels and lighting, the two bottom quintiles are spending only 35% and 41% respectively on electricity and rest of the expenditure is on carbon intensive health deteriorating fossils-based fuels such as fire wood, kerosene oil, charcoal etc. [17]Therefore, a higher electricity prices for these consumers could not only impact their economic activity but also enhance their reliance on conventional carbon intensive fuels.

Impact of electricity subsidies on marginalized sections of the society

Twenty first century witnessed a huge increase in energy demand across the globe mainly because of a surge in economic activity, technological transition and population growth. The surge in cost of fuel and electricity has considerably increased the cost of living along with decrease in the purchasing power of communities across the globe. In these high inflation

times, there is a risk that going forward with high tariffs may result in even lower bill recoveries as customers' ability to pay deteriorates.

According to Pakistan Social and Living Standards Measurement (PSLM) survey report 2019-20, 46% population reported no change in their household economic situation since 2014-15. While 26% reported worse economic situation in 2019-2020 than that of 2014-15. [17] This implies that economic situation of the households remains almost unchanged or worsened over the years. If we take a glance at the per capita GDP of the country, it was USD 1356.6 in year 2015 and dropped to USD 1193.7 in 2020. So it can be inferred that over these years, the economic situation of households truly resembles the economic situation of the country. Keeping in view the increase of domestic tariff per unit, which was PKR 16 [22] in year 2015 and rose to PKR 20 [10] in year 2020 approximately, it is evident that the tariff hike was a huge economic burden for these households.

In Pakistan, households constitute about 47% of the consumer category and industry stands at only 29%. [19] In the supply chain of energy, the most complex stakeholder are the households, each having an individual low consumption but overall have the high volume and thus large impact on the consumption mix. This energy consumption pattern has grave repercussions because these large volume households are supplied with subsidized electricity and their contribution is maximum towards the aggregated technical and commercial loss. The subsidies are meant to encourage households to consume more power, but it needs to be well targeted, otherwise it will keep on putting financial burden on the economy. The households especially those consuming up to 100 units/month known as lifeline consumers, greatly rely on the power subsidies. A study on KE's consumer [19] shows that households with energy consumption greater than 300 units/month, are taking advantage with 51% of the subsidy, while the lifeline consumers are only getting 1.6%. This makes the entire subsidy program, an accounting problem, which can be rectified by offering subsidies based on slab rates.

Amidst the entire economic crisis, the commercial, industrial and agriculture sectors of the country are also neglected. These sectors have been stricken hard by the expensive imports of goods and raw material necessary to keep the business in running position. High electricity prices, increasing number of power outages, power quality issue (fluctuating voltage and frequency) along with costly fuels (coal, gas and RLNG) are further adding pain to misery by constraining the production activities. These sectors also need government support in terms of subsidized energy tariff.

Currently, the subsidy policies fail to provide adequate social protection to vulnerable segments of the society. The categorization rationalized in the recent subsidy reform may not reflect the true household energy consumption for low income households. In Pakistan's culture where a household has many individuals, it may appear rich because of high consumption, but in reality, they might be living on the edge of poverty line. The major drawback of current subsidy program is not taking into account the change in customer's consumption pattern due to seasonal variation. The demand in summer is twice as that of winter and due to this very reason, even the most compromised households have high electricity consumption in summer.

In winter, almost half of poor communities qualify for the tariff category of lifeline users, but in summer, three-quarters among them goes beyond the cutoff (lifeline).[22] On the contrary, about 13% of rich households entitled for subsidy in winter due to low energy demand. Hence, we can infer from the current state of subsidies that lifeline consumers are at a disadvantage and their removal will only make situation worse for them.

Recommendations for alternate solutions and remedies

Although the reforms to improve fiscal condition of Pakistan are implemented, the resulting economic activity should not decline. The withdrawal of subsidies can be damaging, particularly for vulnerable people and their contribution towards economy. If the prices of electricity represent actual costs of electricity, they can either substitute their consumption with conventional carbon intensive sources of energy or may also decline their energy consumption. Moreover, people who are consuming electricity at the edge of protected and unprotected consumers, may also start consuming less electricity. So, this has the potential of declining their socioeconomic status further. Therefore, the economic reforms have to ensure wellbeing of the vulnerable sections of the society. Following recommendations can help in the direction of a just financial transition of the energy sector:

Lowering operational inefficiencies

The financial sustainability of power sector is indispensable for our economic stability. All power sector entities, including DISCOs that are at the core of liquidity issues in the power supply chain, shall strive for managerial and operational efficiency and financial independence. The cost of inefficiencies shall not be passed on to the end consumers so that the responsible entities could bring necessary changes within their processes to avoid financial losses.

Aiming for low cost electricity generation mix

Efforts should be made to reduce the high cost of power generation from imported fossil fuels-based resources to cheaper and cleaner renewable energy resources. The indigenization drive promoting more variable renewable energy resources in the country should be focused, which will not only help meet the climate targets but also lower the overall basket price of electricity. An affordable electricity price will eliminate the need for subsidies.

Reforming end users tariff structure

Rwanda is going through similar fiscal challenges as Pakistan - increasing fuel prices and non-cost reflective tariffs beginning from 2015 - took the task to address the weakening financial position through Energy Subsidy Reform Facility under the World Bank.[4] As immediate actions, they introduced incremental block tariffs and made a category of lifeline consumers in the bill for consumers using less than 15kWh units of electricity per month. This helped in the cost recovery and later on average tariffs moved closer to reflect actual costs.

Pakistan has also reformed consumer end tariffs, in which end users have been categorized based on their consumption. This revised structure will help alleviate the burden of electricity

bills on low-consumption households, however, it still needs improvements. The impact of seasonal consumption needs to be incorporated so that subsidies should be beneficial for the poorest sections of the society. Also, careful consideration should be given to the poor as well as near poor population that will need welfare assistance as the prices of electricity soar. But, in general, for an average consumer price of electricity is exorbitant especially when fuel cost adjustments are also added in the bill. So, it is important that cross subsidization within the consumer categories be implemented to settle financial shortfalls without lending support from budget.

Implementing phase-based strategy to reduce subsidies

It is important that the subsidies are removed in phases so that end consumers do not suffer from a price shock and substitute their energy consumption with health deteriorating carbon intensive alternatives.

The government should introduce alternative means to provide subsidy (other than tariff discounts) such as bill credits, waiver of connection fee and late bill deposit surcharges, which will provide extra relief to poor households. The phased base strategy should be adopted, whose integral part must be establishment of communication strategy with the general masses to increase their awareness on subsidies, current standing of power sector and build their trust on power sector. A well-informed and satisfied customer especially commercial and industrial sector, might be willing to pay even higher price for reliable supply of electricity.

Implementing efficient social safety net programs

Subsidies are not an efficient instrument of support. It can be understood from the poor financial position of our energy sector. The payment of subsidies is contingent on budget availability, and their untimely disbursement results in debt and high borrowing costs. More often, households with high consumption of electricity and better socioeconomic status get more benefits from subsidies than the poor. So, there could be leakages, as well as distortionary economic incentives. Social Safety Net⁸ programs are designed to provide regular and predictable support to poor and vulnerable people. These programs are more effective in terms of targeted benefits to the poor and vulnerable communities.

For example, the Malaysian government substituted subsidies with grants for LED lamps and rooftop photovoltaics to low income residential consumers with 450 VA and 900 VA capacity limits.[15] Targeted and universal cash transfer mechanisms are also widely used. They are more immediate, tangible and show that the government upholds the social contract.[5] These direct welfare assistance programs could provide more relief to end consumers in the long run. A national registry of socioeconomic status of households has been prepared under the previous government's social initiative Ehsaas. Once the synchronization process of linking

⁸ **Social safety nets (SSNs)** are measures designed to provide regular and predictable support to poor and vulnerable people. A distinctive feature of social safety nets is that they are noncontributory, that is, beneficiaries do not have to pay or contribute financially to receive the benefits. [23]

socio-economic statuses with the unique identifications of the needy consumers is completed, the dissemination of in-kind incentives or cash transfers could be attempted. In this way, the government's support can directly reach to the poor and vulnerable communities more justly and efficiently.

Furthermore, our government can offer solar PV systems to consumers on subsidized rate, thereby not only providing relief to customers, but also creating an income generation stream for them. DISCOs can also be mandated to procure such systems and provide electricity to poor households at cheaper prices. These reforms, if adopted steadily, might help people to adjust with the new environment and develop a sense of ownership and trust on the government. This approach can also facilitate a smooth transition to high-energy prices in the short term, without harming the sentiments of the public, as they get compensation and relief through other mechanisms.

Pakistan also has a flagship Benazir Income Support Program, which is an unconditional cash transfer program targeted towards women. Various branches of this program have emerged helping the poor households in their monthly groceries to educational expenses. This program can be extended to provide financial assistance in energy bills of poor and near poor populations. Since cash transfers cannot be mandated to be utilized for a certain expense, a voucher and rebate system can be a better alternative, as a recent analysis has revealed.[24] Under this system, the government will first identify the level of electricity consumption below which households are to be protected. Then, based on the threshold, the identified households can be provided a voucher for a set of units (e.g. 100 units) be consumed free of cost and additional units be consumed at discounted rates.

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