Building Public Support for Energy Subsidy Reforms

What Will it Take?
Executive Summary

Many governments around the world subsidize the energy consumption of their citizens. Despite the negative economic and social consequences of providing these subsidies, embarking on meaningful reforms has been challenging for policymakers, especially in the face of rising costs of living. Even when crises or other pressures have prompted action, attempts at reforms have often failed outright or have had to undergo major reversals. Yet, growing debt distress in many parts of the world and the need to address climate change by curbing greenhouse gas (GHG) emissions from the burning of fossil fuels has redoubled the urgency to address energy subsidies.

This study used tools from experimental economics and a novel data collection method to survey 37,000 respondents in 12 middle-income countries that provided over US$ 750 billion in explicit and implicit fossil fuel subsidies in 2022. It represents the largest cross-country study covering middle income countries on this issue, presenting unique, bottom-up insights on how knowledge and beliefs influence views on energy subsidy reform and how attitudes can shift.
Five main messages emerge from the analysis.

First, baseline support for subsidy reforms is low. Without anything offered in return, less than a third of respondents in our cross-country sample were willing to support a reduction in fuel or electricity subsidies which would lead to an increase in prices. This finding confirms what has been reported in the existing literature on the topic and is also consistent with practitioner experience.

Second, support for reforms can increase when the reform proposition is packaged with compensatory policies. In our sample, support for reform doubled, and even tripled in some instances, when respondents were offered alternative policies in return which could be financed using the subsidy savings. Further, when presented with a menu of options for reinvesting savings from energy subsidies, there was a clear preference among the survey respondents for spending to be directed toward better schools, hospitals and roads over cash transfers and tax cuts. It is noteworthy, however, that even the least popular choice – universal cash transfers – was favored by over 60 percent of respondents.

Third, deeply held beliefs about subsidies, such as believing that citizens are entitled to them or doubts about the government’s ability to implement reforms pose obstacles to reforms—however, these challenges can be overcome. For example, when compensatory policies were offered, respondents who believed they have a right to subsidies were just as likely to lend support to reform as those who did not share the same belief. The government’s capacity to deliver on the conditional offers would be critical to the realization of the reform package, suggesting that efforts to put in place commitment devices to signal credibility of the counteroffer could bolster reform efforts. Respondents who trust the government were consistently more likely to be supportive of subsidy reforms, regardless of whether compensatory policies were offered or not.

Fourth, providing information about the negative consequences of energy subsidies, particularly in terms of the environmental externalities caused by the overconsumption of fossil fuels, helped make the case for reforms and could be an under-exploited instrument in efforts to build more support. The shift in views was strongest among respondents who perceive themselves to be middle class—which forms a large and important part of the electorate—in countries where fuel is the predominant form of subsidized energy.

Finally, as the reform process unfolds, open and iterative communication with the public can foster a better understanding of their diverse and evolving policy preferences. The written answers to an open-ended question in the survey, where respondents could freely express their opinion, showed that better education and health were the most salient demands. Still, they also unveiled a much more detailed list of priorities. The latter not only varied by demographic characteristics but is also likely to be dynamic in the face of changing economic circumstances.

While subsidy reforms are difficult to implement, they have become an urgent need for many countries. Findings of this cross-country study suggest that it may be possible to garner public support for energy subsidy reforms by making them part of a broader reform campaign. That strategy specifically includes elements of compensatory packages that are negotiated quid pro quo within societies. In addition to ensuring their commitments to reinvesting the savings from diverted subsidies are credible, governments could deploy iterative communication strategies to help raise the general level of awareness around reforms. That would include appealing to concerns for climate change, fairness, and efficiency in the use of public resources, which are shown to have wide traction in the population. In addition to customizing the compensatory packages to best suit their circumstances, countries could consider deploying rapid data collection instruments, including opinion surveys, to build awareness about subsidies and at the same time track evolving public sentiment and identify gaps in the rollout of any short-run compensatory measures. This would enable governments to forestall resistance from a vocal minority who may not need government assistance, while doing what it can to ensure that those who need support are not left worse off.
The Challenge of Energy Subsidy Reforms

Many governments around the world subsidize the energy consumption of their citizens. The direct costs of energy subsidies soared to a record US$1.3 trillion in 2022, mostly on account of elevated fuel prices and an expansion in subsidy schemes. In fact, at least 65 countries introduced or expanded fuel subsidies in the last two years.

Energy subsidies are associated with several negative economic and social consequences (figure 1). First, energy subsidies are an inefficient use of public funds. They divert significant financial resources that could be better spent on growth-enhancing spending such as education, health, and infrastructure. On average across the 12 study countries, energy subsidies amounted to 3.7 percent of GDP, which was greater than the 2.2 percent of GDP spent on average on health care, for example. Second, the benefits from subsidies accrue disproportionately to the rich who consume more energy. On average, 43

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percent of subsidy benefits accrued to the richest 20 percent of the population in the countries in our sample, compared to only 8 percent that benefited the poorest 20 percent. Finally, there are broader negative externalities associated with the consumption of fossil fuels, which are typically not factored in. Energy subsidies distort prices, so that the resulting overconsumption contributes to global warming, intensifies local air pollution, and generates transport externalities such as congestion, the cost of which the IMF estimates at over US$ 5 trillion annually around the world. It has been suggested that the removal of fossil fuel subsidies alone could help countries achieve their commitments to curtail greenhouse gas (GHG) emissions under the Paris climate agreement.3

**FIGURE 1.** The efficiency, equity, and environment consequences of energy subsidies

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Despite the many potential benefits from reducing energy subsidies, reforms have been historically difficult to undertake. An immediate challenge is that the reduction in subsidies would lead to an increase in the cost of living, particularly hurting the poor and the middle class. This fear has often sparked protests in the past, particularly when the reform was attempted amidst economic crises.

Energy subsidies may be inefficient from a public finance perspective, but they are a relatively easy way to deliver benefits to its citizens, and sometimes one of few tools which states may have at their disposal. Subsidies could be seen as citizens’ rightful share in the country’s natural wealth, a form of compensation for hardships during economic crises, or as a way of receiving tangible benefits from the government when trust is low or the capacity of the government to deliver better services is weak. Where subsidies are regarded as part of an implicit social contract between citizens and the state, reducing subsidies without adequate compensation may be regarded as a violation of the social contract.\(^4\) Additionally, countries often get entangled in complex political challenges in the presence of multiple stakeholders, some of whom have a vested interest in maintaining the status quo.\(^5\)

Subsidies have become so entrenched in many countries that there is a widespread lack of awareness among citizens that their energy consumption is subsidized to begin with. Our cross-country study revealed that on average, just over half of respondents were aware that fuel or electricity subsidies existed in their country. Awareness tended to be high in countries such as Indonesia (exceeding 80 percent) that had gone through multiple, highly publicized reform episodes in the past, but was at modest levels in most others (figure 2).

**FIGURE 2.** Level of awareness that energy subsidies exist in their country (%)
These factors compound the complexities of the reform process as people may feel entitled to lower energy prices, especially when they are uncertain about what the government can credibly deliver in its place. Much of the public discourse on energy subsidy reforms tends to be dominated by the need to implement fiscal savings, improve allocative efficiency, and make public spending more equitable. In fact, reforms are often attempted when countries are facing an imminent fiscal cliff. However, governments often end up abandoning reform attempts due to widespread public opposition, stemming from the lack of confidence in the government’s ability to implement alternative programs or due to lack of trust that the government will do the “right” thing. This lack of trust could be related to experience with corruption or questions about the government’s capacity to deliver on their promises.

Efforts to overcome this trust deficit can help deliver much-needed reform at a time when global debt is at its highest level in decades and countries around the world are facing tightened fiscal space. But public support is critical for the success of subsidy reform efforts. The experience from historical reform episodes suggests that communication with the public is crucial to increase acceptance of reforms, but also that simple dissemination of information is far from sufficient.

This policy brief presents the key findings from a large, cross-country survey to provide a unique, bottom-up perspective on energy subsidy reforms. By systematically examining citizen attitudes and preferences toward energy subsidy reforms, we present several novel insights on how people reason and how their knowledge and beliefs influence their policy preferences. The methodology underlying the findings in this brief is summarized in Box 1.

**BOX 1. Methodology**

The findings presented in this brief are based on an online survey conducted across 12 middle-income countries. These include Angola, Argentina, Bolivia, Ecuador, Indonesia, Kazakhstan, and Nigeria which predominantly subsidize fuel, and Bangladesh, Egypt, Ghana, Pakistan, and Vietnam which predominantly subsidize electricity, according to the latest IMF database on fossil fuel subsidies. These countries were collectively responsible for spending nearly US$200 billion on explicit energy subsidies in 2022. The survey was implemented in June/July 2023 by a leading online global research firm and engaged about 37,000 respondents. The sample of survey respondents is broadly representative of the population with internet access, at least in terms of age and gender. Unweighted results were compared to those that were weighted to match the general population in each country. The results were largely consistent.

The survey collected a wide range of information on respondents’ background characteristics, including questions on standard demographics and income; information about their household’s energy consumption; their views about the government, including their beliefs about the government’s capacity to help households deal with the rise in cost-of-living, and their level of trust; information about their knowledge of and beliefs about energy subsidies; and willingness to support an energy subsidy reform. A randomized experiment was carried out that consisted of a simple and factual statement informing respondents about the efficiency, equity, or environment related consequences of energy subsidies. More details on the survey and results from the analysis can be found in an accompanying technical background paper entitled “Building public support for reducing fossil fuel subsidies: evidence across 12 middle-income countries”.

6 The survey instrument is not intended to capture sentiment among all direct or indirect beneficiaries, which could vary across countries depending on the type of energy subsidies provided and the mechanisms through which direct or indirect subsidization takes place.
What Can Governments do to Build Public Support for Subsidy Reforms?

Message 1: Support for a reduction in energy subsidies is low in the absence of any compensatory measures.

The results from our cross-country study establish that subsidy reforms in isolation are not likely to get governments the support needed to implement and sustain them. Given the complex challenges outlined in the previous section, it is unsurprising that our study finds only modest support for a reduction of energy subsidies when it is not accompanied by other mitigating measures. This finding confirms what has been previously reported on the topic and is also consistent with practitioner experience. On average, less than a third of respondents were willing to support a reduction in fuel or electricity subsidies which would lead to an increase in prices, although variation was observed among the respondents across the 12 study countries (figure 3).
FIGURE 3. Level of support for energy subsidy reform without any compensatory measures (%)

Source: Bank staff estimation based on online survey data from 12 countries. See Box 1 for details.
Note: This figure shows the share of respondents who answered that they would either "strongly support" or "somewhat support" a reduction in energy subsidies which leads to a price increase.

FIGURE 4. Characteristics and beliefs associated with unconditional support for energy subsidy reform

Source: Bank staff estimation based on online survey data from 12 countries. See Box 1 for details.
Note: This bar graph shows the coefficients from an ordinary least squares regression with country fixed effects, estimating the relationship between respondent characteristics and beliefs and unconditional support for energy subsidy reform (i.e., support for a reform in the absence of compensatory measures). The blue and orange colors of the bar graphs indicate that the estimated relationship is statistically significant at the 5% level and positive or negative, respectively. "Actual poor" is based on reported actual income and refers to respondents with household income in the bottom 40 percent of the income distribution. "Perceived poor" and "perceived middle class" are based on respondents' perceived position in the income distribution. The grey color indicates that the estimate is not statistically significant.
People may be worried about the hardship imposed by price increases if the reforms are uncompensated—indeed, we find that the respondents who perceived themselves to be poor or middle class (for whom price increases will be more salient) were less inclined to support a potential reform. About one-third of respondents—not a small share—agreed with the statement that they have a right to receive subsidies. While there was no obviously clear pattern between their belief and the country’s oil production capacity, there was less support for a reform among respondents that believed subsidies are a right. Meanwhile, those who trusted the government were more likely to support a potential reform even when no compensatory policies were offered. Knowledge was also a strong predictor of support—respondents who were aware that subsidies exist were much more likely to be in favor of price reforms (figure 4).

**Message 2. A commitment to reinvest the savings from subsidy reforms to fund better schools, hospitals, and roads, for example, can double the level of public support.**

A key finding of our cross-country study is that support for reform can effectively double, or even triple in some instances, if it is coupled with compensatory policies that are financed using the savings from subsidies. As seen in Figure 3, only around 30 percent of respondents were willing to support a reform without compensation. However, this figure increased significantly when people were offered compensatory policies in exchange for subsidies, akin to a quid pro quo. The most popular alternative to reinvest the funds was in better schools, hospitals, and roads. Only a small fraction of respondents (less than 10 percent in all countries) appeared to remain unmoved (figure 5).

**FIGURE 5. Levels of unconditional and conditional support for energy subsidy reform (%)**

Source: Bank staff estimation based on online survey data from 12 countries. See Box 1 for details.

Note: This figure shows the cumulative share of respondents in each country that expressed: “unconditional support” (including when they would support unconditionally and conditionally), “Cond. support (spend)” if the alternative policy was better schools, hospitals, and roads, “Cond. Support (other)” if they were willing to accept another compensatory policy and “No support” when there was neither unconditional nor conditional support.
While the rankings of the preferences varied across countries, the common message is that a large majority could be won over when compensatory policies are offered.

When it comes to reinvesting the savings from energy subsidies, there was a clear preference for better services over cash transfers and tax cuts. The survey probed policy preferences among seven different choices: (i) cash transfers to all households; (ii) cash transfers to poor households; (iii) a reduction in income taxes; (iv) better schools, hospitals, and roads; (v) a reduction in the public debt; (vi) investments to improve the environment (like improving air quality); and (vii) more reliable access to electricity and fuel. After better schools, hospitals, and roads, which garnered an impressive 80 percent support across the countries in our study, followed by more reliable access to energy and investments to improve the environment, such as air quality. These policies were strongly preferred over other options such as tax cuts or even cash transfers, though even the least popular choice—universal cash transfers—was favored by over 60 percent of respondents (figure 6).

There are several takeaways from this result. First, there appears to be a clear preference for better services, based on the outcome-oriented framing of the polity options, over more cash in hand. The top-ranked choices were consistent across countries. Second, while the public debate related to compensation often revolves around cash transfers, these results suggest that this does not always have to be the case. While there are clear success stories in the past, cash transfers are not always readily implementable, especially in capacity-constrained countries. Our study shows that there are other policy alternatives beyond cash transfers that can be as or even more effective in rallying the public around the reform while making progress on issues that people care about most.

**FIGURE 6.** Levels of support for alternative policy options (%)

Source: Bank staff estimation based on online survey data from 12 countries. See Box 1 for details. Note: "Unconditional support" refers to the level of support for reform without any compensation.
Message 3: Deeply held beliefs about subsidies, such as believing that citizens are entitled to them can often be obstacles to reforms—but they can be changed with a credible commitment to implement a broader reform package.

The consistently high level of support for compensated energy subsidy reform across all study countries is counterevidence to a popular misconception about citizens’ resistance to subsidies. Earlier evidence showed that an uncompensated reduction in subsidies is not likely to garner the public support needed. However, once compensatory policies were offered, respondents were equally likely to be supportive of reform, irrespective of whether they were likely beneficiaries of energy subsidies or not (figure 7).

Seemingly deep-rooted beliefs that lead citizens to oppose reforms can change under certain circumstances. For example, the belief that citizens are entitled to receive energy subsidies is pervasive in some countries and often perceived to be difficult to overcome. Recall from earlier that people with this belief were less supportive of an uncompensated reform. But when compensatory policies were offered, respondents who believed subsidies are a right were no less supportive of a potential subsidy reform compared to those who do not share the same belief (figure 7). This suggests the potential to shift the prevailing social contract, with the majority of respondents prepared to swap energy subsidies in return for better schools, hospitals, and roads.

Commitment devices can be put in place to signal the credibility of reforms, to ensure that promises are delivered even in the face of changing circumstances. Such mechanisms can help bolster the belief that the government can assist households, which is positively and strongly associated with support for reform (figure 7).

**FIGURE 7.** Characteristics and beliefs associated with support for a compensated energy subsidy reform

![Bar graph showing the relationship between characteristics and beliefs associated with support for a compensated energy subsidy reform.](image)

Source: Bank staff estimation based on online survey data from 12 countries. See Box 1 for details.

Note: This bar graph shows the coefficients from an ordinary least squares regression with country fixed effects, estimating the relationship between respondent characteristics and beliefs and support for an energy subsidy reform which is accompanied by compensatory policies. The blue and orange colors of the bar graphs indicate that the estimated relationship is statistically significant at the 5% level and positive or negative, respectively. “Actual poor” is based on reported actual income and refers to respondents with household income in the bottom 40 percent of the income distribution. “Perceived poor” and “perceived middle class” are based on respondents’ perceived position in the income distribution. The grey color indicates that the estimate is not statistically significant.
A commitment device would be particularly effective where past reforms have failed due to lack of trust in the government or concerns about its capacity to implement alternative policies. Respondents in our study countries who believe that the government can be trusted were consistently more likely to support subsidy reforms, regardless of the type of compensatory policy offered, and often by a wide margin (figure 8). There are different ways that the government can demonstrate its commitment. For example, the government could implement compensatory policies before subsidies are removed, so the alternative policies are visible and tangible in the eyes of citizens. This could be, for example, providing cash in people’s pockets before energy prices are hiked.\(^7\) Countries could also consider establishing a social welfare fund where the fiscal savings could be redirected and earmarked for alternative spending priorities.

Message 4: Information about the negative consequences of energy subsidies, particularly in terms of damaging the environment, has significant potential to raise support for reform.

Knowledge has a direct and indirect role to play when it comes to winning the public campaign. People who are aware that subsidies exist are more inclined to support the subsidy reform, irrespective of compensatory policies (figure 4, figure 7). Additionally, knowledge can foster trust in the government which in turn leads to robust public support.

Providing information can play a significant role in boosting support for energy subsidy reforms. As seen earlier, awareness of subsidies is on average modest across the 12 study countries. Meanwhile, awareness of the negative consequences of energy subsidies, particularly in terms of damaging the environment, has significant potential to raise support for reform.

**FIGURE 8.** Difference in level of support for subsidy reform among respondents who trust the government compared to those who do not (%)

![Graph showing difference in level of support for subsidy reform among respondents who trust the government compared to those who do not (%, with categories like Better schools, hospitals, and roads, Better access to energy, Investments to improve the environment, Cash transfers for poor households, Tax cuts, Reductions in public debt, Universal cash transfers.]

Source: Bank staff estimation based on online survey data from 12 countries. See Box 1 for details.

the negative consequences of energy subsidies are even less well-known, particularly in relation to the environmental damage. About half of respondents recognized that subsidy spending was greater than or comparable to healthcare spending in their country, making it an inefficient allocation of government resources. About 4 in 10 respondents were aware that more well-off households benefit disproportionately from energy subsidies compared to poorer households. Only about a third of them recognized that subsidies have adverse impacts on the environment (figure 9).

Our study finds that communicating this information to citizens increases public support for a potential reform, partly due to low levels of existing knowledge. In a randomized experiment conducted within the cross-country survey, respondents who received information about either the efficiency, equity, or environment related consequences of energy subsidies were more likely to support a potential reform, even in the absence of compensatory measures. This was true mostly in countries that predominantly subsidize fuel. The magnitude of the effect ranged between 8-10 percent beyond a baseline of around 31 percent. This is not a small effect, considering that providing information only requires a modest outlay and is relatively effortless compared to implementing compensatory policies. The “information effect” varied relatively little across different population groups based on their prior beliefs and knowledge, suggesting that communication campaigns need not necessarily target specific population groups and that broad-based campaigns can be similarly effective. It also implies that reform campaigns should emphasize the “what” (campaign messages) more than the “who” (target audience).

In what may have been a more surprising finding, information about the harmful environmental aspects of subsidies proved to be powerful in shifting people’s views. The effect was at least as strong as information about the inefficiency or inequity of subsidy spending. This suggests that the environmental objective of subsidy reforms could hold a lot of potential for building support for energy subsidy reforms which have often been

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8 The magnitude of the estimate effect was largest for the environment treatment but the difference with either the efficiency or equity treatment effect was not statistically different.
dominated by arguments related to fiscal savings or fairness in the past. The shift was largest among respondents who perceived themselves to be middle class—which forms an important part of the electorate—and was apparent in countries where fuel (and not electricity) is the predominant form of subsidized energy (figure 10).

**Message 5. Policy preferences vary across population groups—and the reality of the reform process requires a good understanding of these diverse priorities.**

A closer examination of preferences reveals that the expressed policy priorities are quite diverse, with important differences across population groups. Respondents were asked to give written answers to an open-ended question in the survey where they could freely express their opinion. The word cloud in Figure 11 is based on a keyword search analysis using their responses. It shows that better education and health were most frequently mentioned by respondents, reaffirming the ordering of broad priorities described earlier. But it also unveiled a much more detailed list of preferences such as employment and poverty reduction. Moreover, there are notable variations in the priorities suggested by respondents: for example, female respondents are more likely to propose childcare, health-related initiatives, poverty reduction and environmental efforts as alternative uses for the funds saved from subsidy reforms. In contrast, male respondents were more inclined to recommend that the funds be used toward industry and trade initiatives and technology advancements, while also more likely to persist in advocating for spending related to electricity and fuel or renewable energy.

10 A large majority of respondents identify themselves as being middle class (about 70 percent on average across the 12 countries).
The diversity in policy priorities will be useful to understand as policymakers design the actual policy package as part of the broader reform campaign. The details of the compensation package will be country context-dependent and would benefit from iterative communication with the public. To this end, opinion surveys can be used as a quick, two-way communication channel with the public to increase awareness around subsidies, help disseminate information, and to gather citizens’ preferences to determine what it will take for them to accept the proposed reform. While convincing the public is one important piece of the reform puzzle, dealing with stakeholders and other organized political groups may be an additional challenge. The reform campaign can also help keep this on the agenda of the majority citizens who tend to be more dispersed and less likely to mobilize in support of a policy agenda.

**FIGURE 11.** Frequency of preferred policy themes as alternatives to energy subsidies

Source: Bank staff estimation based on online survey data from 12 countries. See Box 1 for details. Note: The bigger and bolder the word appears in the word cloud, the more frequently it was mentioned in the written answers to the open-ended question asking about respondents’ preferences for alternative policies that would lead them to support an energy subsidy reform.
Many countries are in urgent need of subsidy reforms, yet they are difficult to implement. Findings of this cross-country study suggest that it is possible to garner public support for energy subsidy reforms by making them part of a broader reform campaign that specifically includes elements of compensatory packages that are negotiated quid pro quo within societies. Compensatory policies are crucial for building public support and for making progress toward better social outcomes for citizens. When people oppose reforms due to lack of trust, it is difficult to navigate the reform with information alone.11 Formulating a complementary policy package, coupled with a commitment device, is instrumental for the public to believe that the government will follow through on its promises and that the reforms will leave them better off.

Mitigation efforts targeting the poor and the vulnerable middle class may still be needed. This is consistent with the recommendation in the policy literature to implement broad-based cash transfers (i.e., to include near-poor groups in compensation schemes) to address the concerns of those most affected by higher prices. Direct compensation still matters for these groups—as seen from the persistently lower levels of support among the poor in our study—and cash or near-cash mitigation mechanisms can be considered to offset their immediate hardship.

In addition to ensuring that their commitment to reinvesting the savings from the removal of subsidies are credible, governments could deploy iterative communication strategies to help raise the general level of awareness around subsidies. They could also appeal to concerns for climate change, fairness, and efficiency in the use of public resources, which are shown to have wide traction in the population.

These communication efforts could be designed to help policy makers aggregate the public’s views and policy priorities, and dynamically track progress and gaps in the implementation of compensatory measures as the reform unfolds. This would enable governments to forestall resistance from a vocal minority who may not need government assistance, while doing what it can to ensure those who need support are not left worse off.

Our study has underscored that it is possible to make progress on a long-standing and challenging reform agenda. However, the complex institutional and political realities also mean that reforms need to be taken with a longer-term view, especially in places where subsidies are entrenched and regarded as part of the implicit social contract—changing that narrative is possible, but it may not happen immediately. Recognizing when there is a window of opportunity and building up coalitions around the reform agenda will help. It will take careful preparations to build a reform campaign that communicates with the public not just on the immediate rationale for reform, but also to help envision what the alternative future under the reform could look like.

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