Fossil fuel subsidies often prove to be a drain on the resources of developed and developing countries alike. When prices are kept below cost-recovery levels, the overall viability of the energy sector can be adversely impacted, which, in turn, can impact efforts at improving supply quality, expanding access, or improving efficiency. As well as creating unsustainable fiscal pressures, energy subsidies can be regressive and inefficient, and lead to overconsumption of fossil fuels—reducing the incentive to use renewable resources, and increasing pollution and greenhouse gas emissions in the process.

However, artificially low energy prices have proved popular as a tool to lower the cost of living and protect national industries from international competition. Worldwide subsidies reached US$493 billion in 2014, representing about 0.6% of global GDP, in the most conservative estimation.

Energy subsidies are often of more benefit to the non-poor and may have little impact on the underlying causes of poverty. Even though the negative impacts of energy subsidies are often well known, attempts to reduce or remove subsidies have been challenging, in many cases leading to social unrest and policy reversals. Phasing out subsidies, particularly if done suddenly and without strengthened social safety nets, can have a negative impact on the poor and vulnerable. At the same time, the primary beneficiaries of subsidies—often industries and middle-class consumers—can be expected to resist reductions to these benefits. Finally, there may also be fears that removing subsidies could adversely impact the country’s competitiveness.

Countries looking to embark upon energy subsidy reforms have highlighted the need for significant support in dealing with the complexity of this issue, particularly with regard to handling the political economy of subsidy and pricing reforms; communicating the negative impacts of subsidies and the need to reduce them; and designing specific solutions to mitigate the adverse impacts of reform on poor and vulnerable populations.

ENERGY SUBSIDY REFORM AND DELIVERY

In response, the Energy Sector Management Assistance Program (ESMAP) of the World Bank launched the Energy Subsidy Reform and Delivery Technical Assistance Facility in 2013. This US$20 million, multi-year initiative is supporting countries as they design and implement subsidy reform programs, involving close collaboration with key national stakeholders, such as government ministries, think tanks, and civil society organizations. The facility offers countries technical assistance on various aspects of energy subsidy reforms, including:

- Analysis of the poverty, social, fiscal, macroeconomic, political, economic, and climate change aspects of subsidy reform;
• Assessment of distributional impacts of subsidies at the household and macroeconomic levels;
• Support for policy dialogue, consultations and stakeholder engagement, communications strategies, and consensus building;
• Support for improving the targeting and delivery of subsidies, including via technology-enhanced approaches; and
• Design and implementation of subsidy reform approaches, energy pricing frameworks, transition plans, stakeholder consultations, and communication strategies; and suitable social protection and other mitigation mechanisms, including adoption of energy efficiency and renewable energy solutions to mitigate the impacts of price increases.

Engagements at the country and regional levels are being conducted through World Bank teams composed of experts in poverty reduction, social protection, energy pricing and reforms, fiscal policy, climate change, social development, and communications.

The facility has also launched a series of knowledge exchange activities encouraging peer learning on both diagnostics and solutions among client countries and at the international level. A global conference was held in Copenhagen in October 2014, bringing together governments from across the world that have undertaken energy subsidy reforms or may be considering such reforms. Conferences on energy subsidy reform were organized jointly with the Friends of Fossil Fuel Subsidy Reform at the sidelines of the World Bank/IMF Spring Meetings in 2015 and 2016 where Ministers from a number of client countries shared their experiences. Several other regional workshops have been held in the Middle East and North Africa and Central America.

The facility has also set up a Panel of Experts and Peers who are available to help client countries in various aspects of subsidy reforms, and are also helping with knowledge exchange.

As part of the knowledge exchange activities of the facility, an online platform has been established for government practitioners who are reforming or are planning to reform their energy subsidies. The platform provides a forum for networking and experience-sharing with peers from other countries and with experts. Interviews, online discussions, reports, and video features on various aspects of subsidy reform design and implementation are regularly updated on the platform. Webinars are also run every few weeks with government speakers from across the world, which are simultaneously translated to allow for dozens of other government counterparts to connect through video conferencing from local World Bank offices across several regions.

The facility is currently working on setting up a comprehensive analytical framework for diagnosing energy subsidies. The objective is to establish a standardized and integrated approach to assessing the various aspects of subsidies in different countries using well-established methodologies and tools, for instance, for assessing fiscal, economic, social, environmental, and poverty impacts; for conducting stakeholder consultations; and for assessing the adequacy of social assistance mechanisms.

In addition to the World Bank, several organizations already produce extremely important analysis and research on subsidy reforms, such as the IMF, OECD, the Global Subsidies Initiative (GSI), and the International Energy Agency (IEA). The facility is collaborating closely with these and other agencies in promoting knowledge exchange.
Algeria: This new activity will provide a comprehensive technical assistance package to the Government that includes identification and quantification of subsidies, evaluation of economic and social impacts of reform scenarios, qualitative evaluation of public perceptions of potential reform, and designing of a roadmap for medium-term reform.

Armenia: Following up on early technical assistance to improve the financial condition of the power sector, this activity will produce analysis to underpin recommendations on how to improve the tariff-setting framework; assess social impacts of tariff increases; identify options to mitigate adverse social impacts; and strengthen the efficiency of public communication about power tariff-setting.

Azerbaijan: This new activity aims to support the Government in analyzing the needs for future electricity price reforms, along with assessment of the poverty and social impacts.

Belarus: The objective of this activity was to support the Government in formulating district heating tariff reform strategies, a communication strategy, and measures to mitigate the negative social impact, including energy efficiency and a targeted subsidies program. Price reforms have begun and the Government has made communications a central aspect of reforms. The Government is also considering strengthening social protection mechanisms.

Central America: The Bank is helping several Central American countries in assessing the economic and social impacts of subsidy reforms, and in understanding the implementation requirements for subsidy reforms. A workshop was held in November 2014 to share international experience in reform design and implementation, as well as on political economy and communication aspects.

China: The Bank is helping the Government to assess the size of its energy subsidies. The effort is aimed at advising the Government on the alternative methodologies available for estimating various subsidies, and will help build capacity on evaluating and monitoring subsidies.

China, Urumqi: A second effort in China is aimed at helping design Urumqi Municipality’s policy on district heating tariffs to support their promotion of affordable, cleaner district heating. This effort is important in sustaining the move from coal-fired boilers to gas-driven district heating, particularly from the point of view of the significant air pollution particularly in winter months.

Egypt: The Bank advised the Government on the economic and social impacts of price reforms, possible subsidy reform alternatives, diagnosis of social protection mechanisms, and the communication and consultation strategy necessary for reforms. This effort also included stakeholder consultations aimed at understanding the attitudes towards energy and energy pricing, awareness of the size and distribution of subsidies, and opinions towards pricing reforms. A second phase of support has begun, aiming at long-term fuel price reform design, strengthening of social protection systems, and communication strategy design.

Haiti: This effort supported the Government in designing petroleum subsidy reforms and analyzing the impacts of these reforms. The Bank supported several workshops aimed at sharing international experience and training government staff on assessing and managing subsidy reforms. Beginning shortly, a second phase of work is aimed at designing targeted assistance programs and reviewing the pricing structure.

Iraq: The Bank is assisting the Government in the assessment and design of subsidy reforms. Along with a diagnosis of the energy sector, the existence of subsidies, and a cost of service study, the activity is also helping to design communication and outreach strategies. A qualitative analysis of public perceptions about the energy sector is also being carried out.

Kyrgyz Republic: This activity supported the Kyrgyz Republic in establishing a sustainable, transparent, and equitable tariff setting methodology for power and district heating. It also included design of a communication strategy and development of a performance accountability and feedback mechanism. The Government has adopted a multi-year tariff policy and begun implementation. A regulatory agency has been established, with clarified roles and functions.

Latin America: This study aims to assess the magnitude of energy subsidies in 9 countries, and their fiscal, distributional and productive impact. This study is also trying to assess the impact of subsidy reforms on competitiveness.
The Bank is collaborating with IDB on this study, with IDB covering 24 additional countries.

**Madagascar:** This activity is assisting the Government to take advantage of low oil prices to eliminate fuel subsidies without harming its economy by providing the analytical basis for revising the pricing formula and adjustment mechanism, a strategy for enduring fuel price removal, a sensitization campaign strategy to explain public resource redeployment and materials, and an evaluation report of the current mitigation measures with recommendations.

**Middle East & North Africa:** This new activity will support the strengthening of social safety nets in preparation for subsidy reform in Algeria, Djibouti, Jordan, Morocco, Tunisia, and Yemen. This activity will support the assessment of the readiness of social safety nets, recommendations for reforms and capacity building, and the creation of a regional platform for regular dialog on subsidy reforms.

**Moldova:** This activity assisted the Government in determining the feasibility of and need for heat and electricity pricing reforms, along with a review of the effectiveness and adequacy of social assistance mechanisms. The Government is considering the findings of this effort, which suggested that pricing reforms are needed to support much-needed investments in service quality improvement, and that social assistance programs need to be strengthened to mitigate adverse impacts on the poor and vulnerable.

**Tajikistan:** The Bank carried out an assessment of the social and economic impacts of current electricity and heating pricing policies and of possible pricing reforms. The study involved comprehensive stakeholder consultations to better understand the impacts of energy shortages (particularly in the winter) on the poor and vulnerable, coping mechanisms, and possible future mitigation measures.

**Turkey:** This effort is helping a recently privatized electricity distribution company to enforce cost-recovery prices and ensure adequate bill collections through the establishment of a social compact with the community.

**Ukraine:** This effort will aid the Government in implementing pricing reforms in district heating and natural gas while protecting the poor and vulnerable. The Bank is helping the Government in continuing price reform implementation, improving the targeting and performance of social assistance mechanisms, training and capacity building, and implementing a communication strategy aimed at building stakeholder support for difficult reforms. As an expanded effort, the Government is now assessing the feasibility of electricity pricing reforms in a second phase activity.

**Uzbekistan:** A comprehensive diagnostic of energy subsidies has recently begun, which will cover aspects such as the fiscal and other costs of subsidies, their distribution across income groups, assessment of social safety nets, and stakeholder mapping.

**Vietnam:** In 2014, the Bank helped the country to design a low carbon development strategy, which also assessed the size and impact of its energy subsidies. Two additional efforts have recently been initiated in support of the country’s energy subsidy reforms. The first activity supports a communication and outreach strategy for electricity price reforms. The second effort will assist the Government in determining the size and extent of subsidies in various energy products, reviewing international experience in this area, and eventually designing a road map for reforms.

**Western Balkans:** As part of a comprehensive assessment of the energy strategy of the region, this effort will analyze the subsidy-related constraints hindering sustainable and affordable energy development in Albania, Kosovo, and Serbia. Identification of key energy issues and constraints, through country-specific and regionally coordinated interventions, are needed to position and guide the Bank’s policy dialogue, technical assistance, and financing support in the area. Additional work will shortly begin, focusing on the poverty and social impacts of energy subsidy reforms, and the adequacy of social assistance systems.

**Zambia:** The Bank is assisting the country in developing electricity tariff principles to help improve cost recovery. The activity will assist the Energy Regulator in developing communication strategies, regulatory impact assessments, and a monitoring system to help regulatory decision-making.