February 2025
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Haganum Model United Nations XV

Devising a joint approach to reducing fossil fuel subsidies

Group of 20 (G20)

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Introduction

Subsidies for fossil fuels have had a history of becoming a bone of contention in almost all global economies and environment policies. These subsidies -which were meant to bring energy security and economic stability- have, in fact, turned out to be a key challenge to climate action. Governments continue to allocate trillions of dollars to coal, oil, and gas industries, despite widespread recognition of their adverse environmental and economic effects. This undermines global commitments to reducing carbon emissions and investing in renewable energy.

As the world's leading economies, G20 nations play a pivotal role in shaping global energy policies. While many member states have pledged to phase out inefficient fossil fuel subsidies, progress remains slow and uneven. Vested economic interests, political considerations, and concerns over energy affordability often hinder collective action. The absence of a unified strategy has led to fragmented policies, with some nations reducing subsidies while others continue to expand them.

To address this issue in a significant way, the G20 will have to come up with a joint approach balancing economic stability, energy security, and climate commitments. Such an approach would involve not just phasing out harmful subsidies but also offering just transition provisions to the industries and communities that depend heavily on fossil fuels. By collaborating, pooling resources, sharing the best practices, using the financial and policy instruments, G20 countries could demonstrate leadership in subsidy reduction and speed toward a sustainable energy future.

Definition of key terms

Carbon Pricing

A policy mechanism that imposes a cost on carbon emissions, either through a carbon tax or an emissions trading system, to encourage reductions in greenhouse gas emissions.

Energy Transition

The global shift from fossil fuel-based energy systems to renewable and low-carbon alternatives, aimed at mitigating climate change.

Fossil Fuel Subsidies

Financial incentives provided by governments to reduce the cost of fossil fuel production and consumption, including tax breaks, direct payments, and price controls.

Stranded Assets

Investments in fossil fuel infrastructure that may lose value or become obsolete due to shifts in climate policy and market trends.

Just Transition

A framework ensuring that the shift away from fossil fuels does not disproportionately harm workers and communities dependent on carbon-intensive industries.

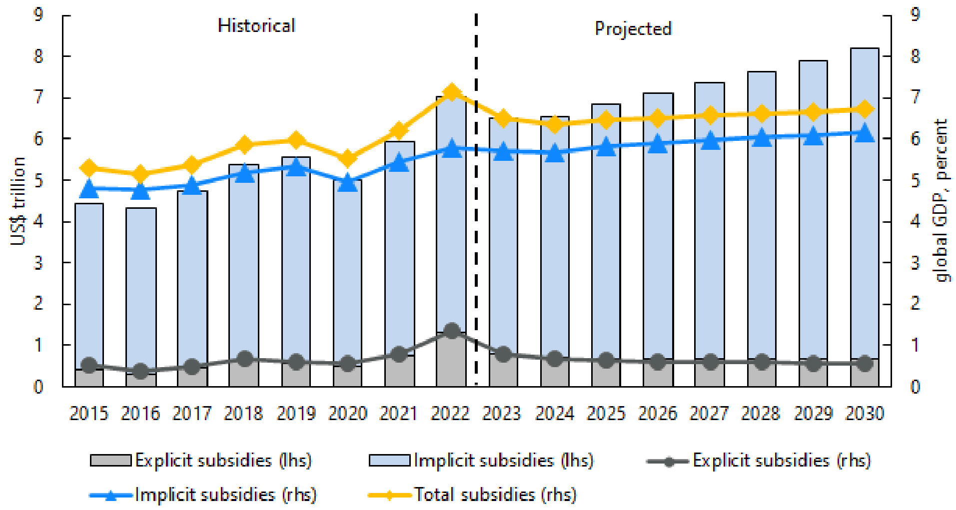
General Overview

Subsidies for fossil fuels have long been established within virtually every national energy policy around the globe. These subsidies have encompassed direct payments from the government, tax exemptions and deferrals, price controls, and incentives for consumption, all geared toward making fossil fuels more affordable. Such measures initially were intended to guarantee affordable energy, promote industrial development, and foster economic growth by specific support to energy- and resource- intensive industries and low-income households. It was under the rationale of improving energy security for the nation and stabilizing fuel prices that fossil fuel subsidies were justified by governments, especially during periods of volatility on international energy markets. Contrary to this intent, it has been increasingly recognized that fossil fuel subsidies constitute a major obstacle in the transition to clean energy. By discounting the cost of coal, oil, and natural gas for the consumer, these subsidies serve to malform the market and disbenefit investing into alternative energy sources, such as solar, wind, and hydropower.

Economic and Ecological Impact

The fossil fuel subsidies operate by reducing carbon-intensive energy sources' prices and increasing their competitiveness compared to cleaner imports. This discourages high investment in renewable energy technologies, which are perceived to be more costly due to high upfront costs. Theoretically, the subsidies perpetuate a market that favors fossil fuels, thus delaying the transition toward sustainable energy.

The economic implications of these subsidies are far-reaching. The International Monetary Fund (IMF) has estimated that by 2030, the total global cost of fossil fuel subsidies will attain an astronomical figure of $8 trillion, i.e., $8 trillion will be approximately 7% of the world's GDP. These subsidies constitute a major burden on national budgets and take away resources that could have otherwise gone to education, health, or infrastructure. Artificially keeping fossil fuel prices low, they subsidize overconsumption, leading to inefficient energy use and heavy reliance on non-renewable energy resources.



(IMF, 2022)

Fossil fuel subsidies also have a very strong negative effect on climate change from the environmental perspective. By making fossil fuel consumption truly attractive, those subsidies create the other additional avenues of carbon emission that drive global warming and environmental degradation. In this context, the IPCC has indicated that the global phase-out of fossil fuel subsidies could reduce greenhouse gas emissions by 10% by 2030, a very significant step toward achieving international climate objectives. This phase-out would not only assist in reducing emissions but also create a clear playing field for renewable energy to be marketed without distortion. Furthermore, the improvement of public health borne out of reduced air pollution from fossil fuel combustion will, in the long run, reduce health care costs.

The role of the G20

The G20, a group comprising the world's largest economies, plays a crucial role in addressing fossil fuel subsidy reform. Collectively, these countries are responsible for approximately 80% of global greenhouse gas emissions, making their policies and actions pivotal in shaping the trajectory of global climate efforts. In a series of declarations, 20 leaders from the group have committed over the years to phase out "inefficient" fossil fuel subsidies. One of the most important accords is the one pledged at the G20 Summit held in Pittsburgh in 2009, where leaders agreed to end fossil fuel subsidies resulting in wasteful consumption.

While committing again and again, progress is unfortunately very slow and inconsistent in accordance with that commitment. Most of the G20 countries still depend on fossil fuels in view of their economic and geopolitical realities. They justify that removal of subsidies tends to abrupt economic destabilization, unemployment, and high energy consumption, particularly in areas where fossil fuels are prominent towards energy access and employment. Thus, spoken and written about subsidy reforms that can be taken up as action has also been extremely slow, with many governments almost idolizing the fossil fuel industry with a variety of hidden forms of financial assistance.

The prevailing conundrum results in achieving economic balance without compromising climate action. Industrialization and economic growth hinge heavily on fossil fuels as a mainstay of several G20 developing and emerging economies. In fact, many of these countries acquire energy at subsidized costs to support key manufacturing, transportation, and agricultural sectors. Therefore, as they move towards an elimination of fossil fuel subsidies, transitioning should be carefully crafted since it should not disproportionately affect vulnerable sectors or hinder economic growth.

G20 countries need to undertake a multi-pronged approach towards accelerating the phasing out of fossil fuel subsidies. The G20 countries should incorporate these strategies to move towards renewable energy investments by gradually bringing such subsidies into renewable energy investments by carbon pricing mechanisms and by strengthening international cooperation for a just transition to achieve these. Finally, increased transparency in subsidy reporting will be needed along with enhanced accountability mechanisms to monitor progress and hold governments accountable for their commitments.

Regardless, the road ahead involves joint effort by the policymakers, businesses, and civil society. Although fossil fuel subsidies have traditionally been used for economic development, the current circumstances under which it now exists make it incompatible with the urgency needed for addressing climate change. The G20, therefore, has the opportunity and the obligation to lead the way in global transformations of the energy landscape. The dying practice of fossil fuel subsidies should be replaced by developing mechanisms of clean energy investments which would bring the world a little closer to a sustainable, resilient, and equitable future.

Major parties involved

United States

As one of the largest consumers and producers of fossil fuels, the U.S. has historically been both a major subsidizer of fossil fuels and a key player in global climate discussions. It has shown varying levels of support for reducing subsidies depending on the administration in power.

China

The world's largest emitter of greenhouse gases and a significant subsidizer of fossil fuels. China's energy policies play a crucial role in global efforts to reduce subsidies, especially as it transitions towards renewable energy.

India

A major recipient of fossil fuel subsidies, India faces the challenge of balancing energy access for its growing population with climate change mitigation. India advocates for gradual subsidy removal to ensure energy security for its citizens.

International Monetary Fund (IMF)

The IMF has consistently called for the removal of inefficient fossil fuel subsidies, arguing that these subsidies distort markets, lead to environmental damage, and undermine sustainable development.

World Bank

As a major financial institution, the World Bank supports global efforts to phase out fossil fuel subsidies, offering financial assistance to countries transitioning to cleaner energy sources.

Organization of Petroleum Exporting Countries (OPEC)

OPEC, representing major oil-producing countries, often supports fossil fuel subsidies as a means of stabilizing energy markets and supporting domestic oil industries.

United Nations Environment Programme (UNEP)

UNEP is a key UN body that advocates for the reduction of fossil fuel subsidies, aligning with global sustainability and climate action efforts, and supporting countries in adopting greener policies.

European Union (EU)

The EU is a leader in climate action, advocating for the removal of fossil fuel subsidies as part of its commitment to sustainability and reducing carbon emissions. It also supports the transition to renewable energy through policies like the European Green Deal.

International Energy Agency (IEA)

The IEA provides policy recommendations on energy issues and has urged countries to phase out fossil fuel subsidies, emphasizing that removing them can promote energy efficiency and accelerate the shift to renewable energy sources.

Saudi Arabia

A major oil exporter, traditionally resistant to subsidy phase-outs but investing in renewable energy.

Timeline of events

2009 September 24th G20 Pittsburgh Summit: Leaders commit to phasing out inefficient fossil fuel subsidies.

2015 December 12th Paris Agreement Adopted: Calls for reducing fossil fuel use to limit global warming.

2016 November 4th Paris Agreement Enters into Force: Countries begin implementing their climate pledges.

2021 November 13th COP26 Glasgow Climate Pact: G20 nations reaffirm commitment to ending fossil fuel subsidies.

2022 October 6th IMF Reports Global Fossil Fuel Subsidies at $7 Trillion: Urges G20 to take stronger action.

2023 December 1st UAE Hosts COP28: Debate intensifies over global phase-out commitments.

Relevant UN treaties and events

A/RES/70/1; Transforming our world: The 2030 Agenda for Sustainable Development: Adopted in 2015, includes targets for phasing out fossil fuel subsidies as part of Sustainable Development Goal (SDG) 12 (Responsible Consumption and Production) and SDG 13 (Climate Action), 25 September 2015.

A/RES/76/300; The Human Right to a Clean, Healthy and Sustainable Environment: Recognizes the role of fossil fuel subsidy removal in protecting human rights and advancing environmental sustainability, 28 July 2022.

Paris Agreement (UNFCCC, 2015): Adopted under the United Nations Framework Convention on Climate Change (UNFCCC), calls for reducing greenhouse gas emissions, with fossil fuel subsidy reform identified as a key measure to achieve this goal, 12 December 2015.

A/RES/74/212; Promotion of New and Renewable Sources of Energy: Highlights the need to phase out fossil fuel subsidies to accelerate the transition to renewable energy, 19 December 2019.

A/RES/75/212; International Cooperation to Address Climate Change: Emphasizes the importance of eliminating inefficient fossil fuel subsidies to meet global climate goals, 21 December 2020.

UNFCCC COP26 (Glasgow Climate Pact, 2021): Calls for the phasedown of unabated coal power and the phase-out of inefficient fossil fuel subsidies, recognizing their role in exacerbating climate change, November 2021.

A/RES/69/313; Addis Ababa Action Agenda on Financing for Development: Encourages countries to rationalize inefficient fossil fuel subsidies while providing targeted support for the poorest, 27 July 2015.

A/RES/71/312; New Urban Agenda: Supports the reduction of fossil fuel subsidies to promote sustainable urban development and climate resilience, 23 December 2016.

UNEP Report: "Fossil Fuel Subsidy Reform: From Rhetoric to Reality" (2021): Provides a framework for countries to implement fossil fuel subsidy reforms in line with sustainable development goals, published by the United Nations Environment Programme (UNEP).

A/RES/73/235; Towards Global Partnerships: A Renewed Approach to Sustainable Development: Encourages international cooperation to phase out fossil fuel subsidies and promote clean energy, 20 December 2018.

Previous attempts to solve the issue

Efforts to reduce fossil fuel subsidies have been a recurring theme in global discussions on sustainable development and climate change. One of the earliest significant steps was the 2009 G20 Pittsburgh Summit, where leaders committed to "rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption." This commitment marked a turning point, as it was the first time major economies acknowledged the need to address fossil fuel subsidies as part of broader economic and environmental reforms.

Following this, the 2030 Agenda for Sustainable Development, adopted in 2015 through UN Resolution A/RES/70/1, explicitly included targets for phasing out fossil fuel subsidies under Sustainable Development Goal (SDG) 12 (Responsible Consumption and Production) and SDG 13 (Climate Action). This global framework provided a roadmap for countries to align their subsidy policies with sustainable development objectives.

The Paris Agreement (2015), adopted under the United Nations Framework Convention on Climate Change (UNFCCC), further reinforced the need to reduce fossil fuel subsidies. While the agreement did not explicitly mention subsidies, its overarching goal of limiting global warming to well below 2°C (preferably 1.5°C) implicitly requires the reduction of fossil fuel dependency, making subsidy reform a critical component of national climate strategies.

In 2015, the Addis Ababa Action Agenda on Financing for Development (A/RES/69/313) also addressed fossil fuel subsidies, urging countries to rationalize inefficient subsidies while ensuring targeted support for the poorest populations. This resolution highlighted the dual challenge of balancing economic equity with environmental sustainability.

At the UN Climate Change Conference (COP26) in Glasgow (2021), the issue gained renewed attention. The Glasgow Climate Pact explicitly called for the "phasedown of unabated coal power" and the "phase-out of inefficient fossil fuel subsidies," marking the first time such language was included in a COP decision. This was a significant milestone, as it reflected growing international consensus on the need to redirect financial resources from fossil fuels to clean energy.

In parallel, organizations like the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD) have conducted extensive research and provided policy recommendations to guide countries in reforming fossil fuel subsidies. For example, the IMF's 2019 report, "Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates," highlighted the economic and environmental benefits of subsidy removal and offered practical steps for implementation.

Regionally, countries like Indonesia and India have made notable progress in reducing fossil fuel subsidies. Indonesia, for instance, implemented significant reforms in 2015 by removing gasoline subsidies and reallocating funds to social programs and infrastructure development. Similarly, India has gradually reduced diesel and petrol subsidies while investing in renewable energy projects.

Despite these efforts, challenges remain. Many countries continue to provide substantial subsidies due to political, economic, and social pressures. The lack of a unified global approach and the absence of binding commitments under international agreements have slowed progress. However, the growing recognition of fossil fuel subsidies as a barrier to climate action, as evidenced by resolutions like A/RES/76/300 (The Human Right to a Clean, Healthy and Sustainable Environment), suggests that momentum is building for more coordinated and ambitious action.

Possible solutions

Economic and Political Strategies

Fossil fuel subsidy reforms are comprehensive, meaning they should integrate economic strategies, political initiatives, and social programs to effect a fair and efficient transition. Among the most potent such economic instruments is carbon pricing, either in the form of carbon taxes or emissions trading systems (ETS). These mechanisms internalize environmental damage caused by the use of fossil fuels, thus making renewable energy more competitive and encouraging businesses and consumers to turn to cleaner alternatives. For instance, the European Union's Emissions Trading System shows how carbon pricing can lead to massive cuts in greenhouse gas emissions while also generating funds for green investments.

Cushioning Policies

To aid in this transition, funds for fossil fuel subsidies could be redirected toward renewable energy and energy-efficient programs. Such reallocation would not only provide some cushioning for the economy but would also speed up the penetration of clean energy technologies. Some countries, like Denmark and Germany, have successfully employed this strategy to achieve global leadership in the technology for wind and solar energy, respectively. In addition, the legislation at the international level plays an important role in translating the commitments made at the level of G20 countries and other stakeholders into actions at the ground level. Concrete mechanisms of enforcement would include regular reporting and peer reviews to make countries accountable and promote transparency.

The gradual removal of subsidies, coupled with cushioning policies, is crucial to mitigate the economic and social impacts of reform, particularly in developing countries. For instance, the way Indonesia phased out its subsidy removal was accompanied by direct cash transfers to vulnerable sections of society, thus ensuring that the reform itself would not worsen poverty levels. The same rationale would apply in developed countries to international financing mechanisms through the Green Climate Fund (GCF) and other climate adaptation funds providing resources to assist developing nations in changing their energy sources. The funds would be used for renewable energy infrastructure investments, capacity building programs, and social safety nets.

Public awareness

Public awareness campaigns are important for driving behavioral change among consumers and industries. Governments can build acceptance of subsidy reforms by educating people about fossil fuel impacts on health and the environment. Likewise, incentives to industry for investing in clean technology could include tax exemptions and grants to stimulate a reduced interest in fossil fuels. For instance, with the benefit of government incentives, automobile companies like Tesla have managed to innovate and expand the market for electric vehicles.

Private sector

Boosting clean energy investments from the private sector is another solution to this problem. By attracting private capital, governments can create conducive policy frameworks such as a streamlined permitting process and a stable regulatory environment. Feed-in tariffs and renewable energy certificates have proved successful in attracting private investment in countries such as India and China. Thus, there is scope for scaling up clean energy projects through public-private partnerships.

International cooperation

To guarantee that fossil fuel subsidy reforms will be fair and efficient, it is necessary for international cooperation. Platforms such as the G20 and the United Nations could assist in creating an environment of knowledge sharing, technical assistance, and financial support. It should be noted that such collaborative initiatives, such as the Fossil Fuel Subsidy Reform (FFSR) Initiative of New Zealand and Costa Rica, are indicative of how countries can cooperate in eliminating subsidies while promoting Sustainable Development.

In conclusion, a coordinated approach to fossil fuel subsidy reform must integrate economic, political, and social strategies. By leveraging carbon pricing, redirecting subsidies, strengthening international frameworks, and supporting vulnerable populations, the global community can achieve a just and sustainable energy transition. This involvement of all stakeholders- including governments, businesses, and civil society- is essential for such an undertaking to be effective.

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