SWP Comments

Stiftung
Wissenschaft und
Politik

German Institute
for International and
Security Affairs

The G20 and Inefficient Energy Subsidies

Grasping the Cause of Price Distortions by the Roots?

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Given that energy subsidies impede the shift from conventional fuels to a more sustainable energy system, the G20's 2009 decision to reduce subsidies on fossil fuels represented an important move. Where the process will lead is still unclear. The G20 states cannot even agree on how to define subsidies, and significant resistance in the individual countries means that progress is unlikely to go any further than pre-existing national plans. But in order to meet climate protection targets, fight fuel poverty and promote a sustainable, efficient and safe energy supply, it is necessary to move towards a low-carbon energy system. Not to mention the drain on state budgets that such subsidies represent. At the moment the process has become bogged down at the inter-ministerial level. A push from the heads of state and government is urgently needed to get the process moving again.

At the Pittsburgh summit in September 2009 the G20 agreed to progressively reduce energy subsidies and eventually allow them to expire. The move created a furore, with the OECD estimating that it could lead to a 10 percent reduction in global greenhouse emissions. In many countries it would represent a fundamental break with existing energy policies. Moreover, access to cheaper energy not only encourages waste but often serves to secure the power of authoritarian elites. If rising energy prices drive up inflation, price reforms will affect the prevailing political, economic and social conditions and unsettle power relations.

The G20's decision was therefore a courageous and important step with the potential to grasp the problem by the roots. Price distortion of fossil and nuclear fuels through subsidies is a decisive obstacle to more efficient energy use, the expansion of renewables and effective action on climate protection.

But now that the Pittsburgh fanfare has faded away it is worth taking a critical look at the motivations and interests of the G20.

The Issue of Energy Subsidies

It is pretty much self-evident that a concerted international effort to reduce subsidies is needed. Energy subsidies interfere massively in the national and international energy markets and distort market and price structures. As well as preventing fair

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competition between individual fuels they create a cost spiral where renewable alternatives also need greater subsidies. Energy subsidies may be applied to reduce production costs or to cut the price paid by the consumer; in most cases they increase the profits of the energy producers, too. They are also an invitation to corruption: Although intended to benefit final consumers, they can be creamed off by traders who "reinvest" the achieved profits in securing their privileges politically.

Estimates by the International Energy Agency (IEA) show that the global subsidies applied to the consumption of fossil fuels in 2009 amounted to $312 billion, while only $57 billion were spent on promoting renewables.

According to the IEA consumers paid about 78 percent of the world market price, meaning that on average fossil fuels were subsidised to the tune of 22 percent in the studied countries. Gas is the most highly subsidised fuel, with a worldwide average of 51 percent, largely because the gas market is still underdeveloped in many countries (and especially in the former Soviet Union gas is the most important fuel for electricity generation and heating). Oil products follow with an average of 19 percent, then electricity with 18 percent and coal with 7 percent. With respect to energy mix targets and climate effects these differences are surely significant.

The list of states subsidising the consumption of fossil fuels is led by Iran, followed by Saudi Arabia, Russia, India and China; the only OECD state among the top twenty-five is Mexico. At the same time, energy production subsidies remain widespread in OECD states, but there is no reliable international data here. The global volume of production subsidies in 2009 was estimated to be $100 billion.

Energy subsidies have paradoxical distribution effects, with the affluent section of the population generally profiting disproportionately by virtue of its higher per capita energy consumption. Although social policy arguments such as counteracting poverty are sometimes cited, they generally have little bearing on actual patterns of consumption.

Above all, however, state-reduced energy prices encourage consumption, which increases global greenhouse emissions, and at the national level either reduces export capacity or increases import dependency. Furthermore, low energy prices can impair long-term security of supply by deterring investment in energy infrastructure.

Governments' attempts to remedy the harmful consequences of consumer subsidies through production subsidies cause a great drain on state budgets. This also applies to renewables, which require massive state aid to compete with directly and indirectly subsidised conventional fuels (above all through the absence of CO_2 pricing). The system conflict between conventional and sustainable energy supply can be observed especially clearly here, with a negative impact on environmental indicators. Finally, the resulting cross-subsidies in energy-intensive sectors lead to further national and international market distortions.

The benefits of pruning back subsidies should not be underestimated. According to the IEA, without subsidies on fossil fuels global primary energy demand in 2020 would be about 5 percent less than the current forecast with the present level of subsidies. Thus it would be possible to reduce energy-related CO_2 emissions by 5.8 percent.

In sum, reducing energy subsidies could contribute substantially to the provision of both sustainable and secure energy.

The G20 Decisions

When the heads of state and government at the Pittsburgh summit on 24/25 September 2009 announced their intention to reduce inefficient subsidies on fossil fuels and to abolish them altogether in the medium term they were not short of reasons to do so. Importantly, they set the decision in the wider contexts of energy security, climate

change and the global economic crisis, with clean energy technologies and renewable energy explicitly exempted. The G20 was not content just to address its own members, instead calling on all countries to reduce energy subsidies. The initiative gained the support of the Asia-Pacific Economic Cooperation and the Friends of Fossil Fuel Subsidy Reform states.

The G20 placed consultation about implementation strategies and timeframes in the hands of its energy and finance ministers, who were to take the current situation in each country as their starting point. Influential organisations such as the IEA, OPEC, OECD and the World Bank were called upon to analyse the extent of energy subsidies and advise on how the initiative could be put into practice.

Subsequent ministerial-level meetings at the G20 summits in Toronto (June 2010) and Seoul (November 2010) reiterated the voluntary obligation to do away with fossil fuel subsidies that encourage wasteful consumption, but also noted the need for compensation mechanisms to assist the poorest members of society. More attention was now paid to country-specific starting conditions and it was acknowledged that the exchange of knowledge and skills itself represents added value. But as far as implementation is concerned scepticism is the order of the day, as the official pronouncements leave enormous scope for interpretation and give every reason to simply wait out developments.

A Frayed Process

Although the Pittsburgh G20 summit agreed to abolish wasteful energy subsidies in the medium term, squabbling over definitions, specifics and timetables soon broke out. Different governments, namely, use different measures to subsidise fossil fuels: tax breaks, price controls, cheap credit or direct financial subsidy. The decisive point is that the cost of energy consumption (and/or production) is reduced.

Initially the debate revolved around the question of which subsidies are inefficient and encourage waste. Because the answer determines the thrust of subsidy reduction, the issue was controversial in the interministerial working group charged with drafting an implementation strategy. The main bone of contention is whether the yardstick for defining energy subsidies should be the world market price or the national production price. Whereas the IEA calculates subsidies by comparing the world market price with the national price, Saudi Arabia leads OPEC in rejecting this method and arguing instead for the respective national production costs to be used.

That had consequences for the rest of the process. Because states have been unable to agree on an existing or new definition of energy subsidies, each state is now responsible for preparing its own reduction plan. And with no set deadline there is great scope for prevarication. As a result the process has begun to fall apart.

Nevertheless, the G20 states presented their implementation strategies as planned in Toronto. With only nine months between the summits the states were left little time to introduce tangible reforms. The different plans put forward by the various governments shed light on the factors holding up the process. First of all it is conspicuous that eight states claimed to grant no inefficient subsidies at all for fossil fuels. Others proposed subsidy reduction action and timetables that largely predated the Pittsburgh summit, while the announced reforms as a whole appear largely unconnected to the G20 initiative. As expected, the national plans differed greatly in their definitions of energy subsidies and assessments of inefficiency.

The Seoul summit extended the working group's mandate at least until the upcoming November 2011 Cannes summit. However its work is currently largely blocked by the ongoing political conflict over the definition of inefficient energy subsidies. The working group has little prospect of resolving this issue because that would

require a political consensus that cannot be achieved at the administrative level. The same disagreement also exists between the international organisations that prepared reports on energy subsidies for the G20: OPEC noted in the first report of the working group that it disputes the IEA's definition, and withdrew completely from participation in the preparation of the second report.

The Key States

Developments in the *United States* are especially troublesome for the future of the initiative. As the host of the Pittsburgh G20 summit in 2009 the United States argued most strongly for cuts in energy subsidies and in the end chaired the working group. President Obama had already announced this policy publicly before the meeting of heads of state and government. At the Toronto summit the United States went on to present by far the most ambitious plan. Whereas other G20 states shied away from publishing details of energy subsidies in order to shield themselves from pressure to introduce reforms, the Obama Administration seemed determined to generate such domestic pressure with a plan to abolish twelve tax breaks for energy producers. The driving force behind this was President Obama's top economic adviser, Larry Summers. However, a bill containing the plan's central measures was defeated by Republican Senators in mid-May 2011. As long as the U.S. government is unable to get its way at home, its ability to promote subsidy cuts internationally is more than dubious. This domestic political development could turn the United States from international driving force to lame duck and hamstring the G20 process.

As far as attitude to the G20 initiative is concerned, *Saudi Arabia* represents the opposite end of the spectrum. According to IEA calculations, Saudi energy subsidies in 2009 amounted to about $53 billion, putting it in second place behind Iran for consumer subsidies. In its report to the G20, however, Saudi Arabia claims not to grant any inefficient subsidies at all for fossil fuels. Riyadh admits that its national energy prices might be below world market levels, but says that this is principally because of its low production costs. Here Saudi Arabia is explicitly arguing the OPEC position. In its report the Saudi government makes it clear that it does not feel affected by the G20 initiative. Turkey also followed the OPEC definition in its national report.

Russia, globally in third place for energy subsidies, asserted its readiness to cooperate and announced that it would implement the G20 initiative in its national energy strategy. However the Russian plan contains no information on existing energy subsidies and possible reductions are outlined only rather generally. Russia had anyway been planning to increase its regulated electricity and gas prices in 2011 and 2014 (although that move was suspended in early 2011 because of rising inflation and the upcoming elections). Especially in the gas sector, the consumer and producer subsidies granted by the Russian government are part of a complex energy policy. Tax breaks "compensate" Gazprom, especially, for lower prices in the domestic market and encourage it to actively seek export markets. If prices were to be deregulated, as the government has vaguely discussed for 2015, the business strategy and coordinates of Europe's most important gas supplier could shift markedly. Above all, high export duties ensure that oil products remain cheap at home.

India, according to the IEA the fourth-largest payer of consumer subsidies, admits providing various energy subsidies. But the Indian government's report contained no plans for subsidy reduction, instead pointing to the ongoing domestic process of energy price reform. The report also suggested that the most strongly subsidised fuels of paraffin and bottled gas could be excluded from any subsidy cuts. The government does, however, intend to end price controls for diesel and petrol. On average the price of fossil fuel in India in 2009 was 85 per-

cent of the world market level, costing the Indian state $21 billion that year.

China, as the fifth-largest payer of energy subsidies, has already raised its national prices to 96 percent of world market level. In its report to the G20 China said it had abolished a tax break for fossil fuel producers but did not mention other subsidies. Beijing emphasised that the tax break in question was not an inefficient subsidy in the sense of the G20 initiative, so there had been no obligation to get rid of it. Nonetheless, given China's ambitious energy efficiency targets a further reduction in national energy subsidies is likely. But China plainly has no interest in international coordination of such measures.

The states of the *European Union* agreed, in the context of the G20 initiative, to use the IEA's definition to identify subsidies. But despite coordination of definitions, the member states still presented widely diverging implementation plans. Whereas the United Kingdom presented no plan at all, Italy revealed three tax breaks for fossil fuels and three social policy compensation measures (without itself classifying these as inefficient energy subsidies). France asserted that it had provided the other G20 states with a list of its tax breaks for fossil fuels (but did not include the list in its report). The German report concerns itself with the phasing out of coal subsidies without going into the question of tax breaks at all. The EU Commission's own report supplies information about minimum tax rates on fossil fuels in the EU but avoids describing the extent of EU subsidies in the agriculture and fishery sectors. Altogether the EU member states showed little willingness to make their subsidies public. Neither the member states nor the EU itself proposed any substantively new subsidy reduction measures.

Pressure and Resistance

Subsidies on fossil fuels are the root of the evil of price distortions. They must be eliminated if progress is to be made on enhancing energy efficiency, expanding renewables and decarbonising the energy system. Pruning back subsidies can also compensate in a small way for the lack of a market for CO_2. Although this route cannot end the externalisation of costs it would stop the overt promotion of consumption and production of fossil fuels and introduce competitive market conditions. Unless the G20 initiative is implemented consistently and globally it will be difficult and expensive to tackle the two big challenges in the energy sector: transforming the energy system and eliminating energy poverty.

The constant diplomatic manoeuvring over this sensitive issue demonstrates that fuels rank as a production factor in their own right. A concerted international approach to this delicate political, social and economic power factor is therefore vital. At the national level energy subsidies are propagated to particular ends, be it economic diversification, energy security or fighting poverty. Even if these goals cannot be achieved, subsidies may survive as an inefficient relict if their beneficiaries apply sufficient pressure. Especially in states with huge energy reserves such as Saudi Arabia, extremely low energy prices help to stabilise authoritarian rule. So energy subsidies open up rifts between democratic and authoritarian states in a way that challenges the G20's ability to deal with the problem.

Cutting energy subsidies is consequently a delicate business, for which the Arab Spring has further heightened general awareness. Reducing widely enjoyed consumer subsidies at the national level can provoke mass protests, as we saw in the G20 states of India and Indonesia, especially where sudden massive price hikes are involved. The safer strategy pursued by China and Russia is to raise prices gradually. It should not be forgotten that alternative approaches to resource distribution and fighting poverty generally require administrative capabilities that are beyond the means of many transformation states. For these states, therefore, broad-brush energy

subsidies are often the means of choice despite their cost and ineffectiveness.

Abolishing production subsidies of the kind that are widespread in the United States and Canada generates less public disquiet, but meets with stiff resistance from powerful energy corporations. Such subsidies are also regarded as an instrument for reducing import dependency and increasing the national resource base, and consequently the debate over subsidies also reveals conflicts between big net importers (OECD) and major exporters (OPEC) as well as distortions in the international energy trade stemming from the growing dominance of state-owned oil and gas companies.

What we are seeing here is not only the problems of collective action but also great mistrust among the actors, as resistance to the G20 initiative is not limited to concrete measures. Even collecting information about energy subsidies is regarded as suspect. The unwillingness of the G20 states to reveal their subsidies endangers the initiative almost before it has even begun.

Certain states such as Mexico maintain that a standardised calculation method is a precondition for any stronger commitment to subsidy reductions, as only then would states be able to verify each other's progress. This argument applies above all in international operations where a domestic subsidy cut is a competitive disadvantage unless other countries match it.

The picture remains ambiguous if we examine the level and fluctuations of energy prices. Wholesale abolition of global energy subsidies should reduce oil and gas prices in states where market prices already predominate. At the same time it can be argued that demand in countries that phase out subsidies would initially remain relatively constant because energy efficiency measures require time to take effect and individual fuels cannot simply be substituted at whim. So the impact of such measures must be expected to come with a certain time lag. At the same time big producers might alter their export-led strategies if domestic prices rose to meet export prices, while fluctuating prices can generate political pressure to act to keep consumer prices stable.

Summary and Recommendations

The G20 is stuck deep in the dilemmas of collective action, experiencing both conflicts of interest and the free-rider problem. Yet its energy policy competence and ultimately its continued existence as a whole depend on its effectiveness in managing such difficulties. We must assess the G20 initiative in a broader context. Together with economic issues, energy questions have passed from the G8 to the G20. Between Gleneagles 2005 and L'Aquila 2009, when energy issues enjoyed a short-lived heyday in the G8, progress was made in bringing together energy security and climate protection and consolidating international energy governance. At least against that standard the G20 should be measured.

Since the energy agenda shifted to the G20 it has been seen primarily through the lens of the financial markets and the economic crisis. Attention has often been directed overwhelmingly to price fluctuations for oil and other resources (whereby the question arises whether high prices or severe fluctuations are more problematic). The global economic crisis and the European debt crisis have heightened awareness of the burden on state budgets.

The G20 initiative for subsidy reduction could kill several birds with one stone, but that would necessitate backing it up and deploying and strengthening existing international governance initiatives. From the perspective of climate protection, as well as social and economic policy, that would mean that shrinking subsidies would have to be coordinated with an expansion of energy efficiency and/or substitution with renewables. The G8 has shown the way with its International Partnership for Energy Efficiency Cooperation (IPEEC). The G20 must explicitly build upon IPEEC and

other programmes and technology platforms set up by the G8. Reducing energy subsidies is also a social policy and development question that needs to be coordinated in the interests of sustainable and resource-saving economic transformation. The G20 could host a supplementary best practice exchange about compensation measures concerning social and energy policy, that would prepare the ground politically for this system transformation.

National reticence over participating in establishing and maintaining energy subsidy databases is a fundamental obstacle. The recording of production subsidies especially leaves a great deal to be desired. One could begin by separating data collection from concrete action, as a decisive step towards increasing transparency and international comparability and enhancing mutual confidence. Here there are clear synergy effects with the Joint Oil Data Initiative, run by the International Energy Forum (IEF) to improve transparency. A concerted effort to improve data collection could also break the vicious circle: it would be easier for participants to agree on data categories if this is not tied to political action. Then they could move on to seek a shared definition of inefficient energy subsidies, and only at the end discuss tangible measures.

Clear direction and the ability to move beyond existing national implementation plans – the lack of which is currently hampering the process – are urgently needed in the medium term to get a coordinated process under way to abolish all subsidies, where unilateral action would inevitably incur substantial (political) transaction costs. The emergence of strong barriers to protect the international competitiveness of energy-intensive industries underlines the need for multilateral coordination (which could also generate useful interactions with WTO processes).

Above all, the process must be consolidated, and not only because the target year of 2020 is looming. Implementation appears inconceivable in the short term, but it is unclear whether the G20 possesses the capacity to pursue the issue systematically over a longer period. Given that its decisions are not legally binding, the processes for information, best practices and coordination of subsidy reductions should be more strongly institutionalised and accompanied by a monitoring mechanism.

The importance of this crucial issue demands that the G20 initiative be revived at the highest political level rather than allowing it to become bogged down at the working level. Given the process was originally initiated through the G20 framework and the transaction costs of a new start can therefore be avoided, this is the route to take.

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ISSN 1861-1761

Translation by Meredith Dale

(English version of SWP-Aktuell 37/2011)