NORDIC DEVELOPMENT FUND
Position Paper on Energy Subsidies

Energy commodities and services are commonly subsidized in both industrialized and developing countries for a variety of reasons. These can include support for indigenous energy sources, protecting consumers against high fuel prices and price fluctuations, and providing energy services to the poor. Subsidies can be provided by general financial support to a utility, support for specific areas such as research and development, or by neglecting external costs induced by the use of the energy source. However, such policies tend to be discouraged by the international development community, the general consensus being represented by the following World Bank statement which essentially refers to fossil fuels:

"Energy subsidies are expensive, damage the climate, and disproportionately benefit the well-off. Their reduction can encourage energy efficiency, increase the attractiveness of renewable energy, and allow more resources to flow to poor people and to investments in cleaner power". [1]

In light of the obvious scope for win-win results, energy pricing reform, including removal of subsidies has been an on-going preoccupation of major donors, especially the World Bank. However, success has been mixed, and indeed there have been many intended departures from this rule in practice. Important issues surround the definition of subsidy itself, and the tradeoffs between the various economic, social and environmental objectives of pricing policy that invariably arise.

First, the definition of subsidy. Traditional efforts in the development community have focused on subsidies to commercial energy, with reform of electricity pricing having been a major target for many years. In the interests of fiscal discipline and operational and end-use efficiency, the intention has been to remove financial subsidies (low interest rates, tax breaks, outright grants etc), and this objective still has to be achieved in many cases. However, it is often argued that even attainment of this goal is insufficient; the more fundamental requirement is to ensure that prices cover not only financial costs incurred by a utility, but in addition any social or environmental costs associated with production or consumption of the energy generated. Failure to do so implies a subsidy in real economic terms. What is needed in such cases is not simply the elimination of financial subsidies – but actual imposition of taxes to cover external or environmental costs, i.e. invoking the polluter pays principle.

[1] Independent Evaluation Group, World Bank, 2009

Although the above approach represents a general goal, in practice deviations have been found to be appropriate. Income distributional reasons may signal the need to subsidize even in financial terms energy consumption where incomes are low and costs excessive, with rural electrification being an important example. In such a case it is generally concluded that support for up-front investment or connection costs tends to be superior to the subsidization of actual energy consumption.

Various means of subsidizing fuels such as kerosene have also been used to address the needs of low income households. Experience has however shown that such subsidies are difficult to administer, and typically have unfortunate and unintended effects. It is often politically difficult to remove subsidies when they are no longer needed, particularly when economic activities have developed in response to them and expectations of continued subsidy are prevalent. Economically and environmentally inefficient behavior is thus built in the system, while failure of the fuel to reach the intended beneficiaries has been found to be commonplace.

While taxes (or regulations or other market based instruments) will typically be appropriate courses of action to counter market failure, i.e. by covering environmental damage costs, subsidies may have a role particularly when for some reason these other methods cannot be applied, or where a "carrot and stick" approach may be required. For example, subsidies to develop renewable energy sources such as solar, wind and geothermal might legitimately be used to help to encourage research, develop a market and achieve economies of scale until the technology can compete commercially with traditional sources. At the same time, environmental taxes or other devices should be used to address carbon emissions from those other sources. As in the case of subsidies introduced for income distributional purposes, strict time limits should be defined up front.

Subsidized public transport is another relevant example. Traditionally used well before the climate issue became important, subsidies are designed to address traffic congestion and local pollution. Climate issues add more weight to the argument for such subsidies particularly when political difficulties of taxing or regulating private vehicles is so great, and will no doubt be justified for some time to come. Administration of subsidies to ensure that they achieve the intended objective is again an issue, while of course the fiscal burden to local governments is a major constraint.

Overall, economic instruments designed to achieve climate objectives may be evaluated in terms of (a) economic efficiency (b) broadly defined environmental implications (c) fiscal consequences (d) administrative feasibility (e) political and social acceptability. Generally speaking, subsidies do not perform well according to the first four criteria. It is interesting that at the same time as it promotes the polluter pays principle, successive reviews conducted by OECD of the use of economic instruments used by member countries to address environmental issues show that subsidies in one form or another account for by far the most prevalent form of economic instrument. In other words, work has to be done on the fifth criterion, a conclusion that applies in both the industrialised and developing countries.

Unfortunately, removing fossil fuel subsidies is no simple matter—it requires strong political will. Although fuel subsidies are often justified as protecting poor people, the bulk of them usually goes to better-off and more politically powerful consumers. Effective social protection measures targeted at low-income groups, in conjunction with the phased removal of fossil fuel subsidies, can make reform politically viable and socially acceptable. It is also important to increase transparency in the energy sector by requiring service companies to share key information, so that governments and other stakeholders can make better informed decisions and assessments about removing subsidies.

As a conclusion and policy guidance for NDF operations, public subsidies to fossil fuels should be discouraged. This would enhance energy efficiency and reduce global CO_2 emissions. On the contrary, subsidies can be extended to level the playing field for clean energy (like solar, wind and geothermal) if this is in line with the policy of the country (c.f. NDF supported solar project in Rwanda). Energy prices should ideally be set to cover the total economic cost of the service, including where necessary energy taxation and instruments such as carbon pricing. Energy subsidies (possibly including cross-subsidization among consumer groups) to protect the poor or provide energy services to them can be justified only if they are well targeted and transparent, and subject to strict time limits. Support for up-front investment or connection costs is considered superior to the subsidization of actual energy consumption.

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