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## International Year of Sustainable Energy for All – who pays the bill?

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# The Current Column

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## International Year of Sustainable Energy for All – who pays the bill?

Bonn, 13 February 2012. The United Nations has proclaimed 2012 as the *International Year of Sustainable Energy for All*. But what does this mean in practice, and how can this goal be achieved?

Let us begin by attempting to define the concepts. In February 2000 the 14<sup>th</sup> German Parliament set up the Enquete Commission on Sustainable Energy Supply Against the Background of Globalisation and Liberalisation, which argued that sustainable energy generation and supply must pursue three objectives: it must be socially compatible, it must make sparing use of natural resources in the long term, and it must protect the climate. The Commission's main message at that time was that today's energy supply system is not sustainable in various fundamental respects, if only because CO<sub>2</sub> emissions are too high and many people do not have access to basic energy services.

But how many people do not have access to a stable energy supply? We should remember that in late October 2011 the United Nations announced the symbolic birth of the 7 billionth human being. In its current *World Energy Outlook* the International Energy Agency (IEA) estimates that, of those 7 billion people, over 1.3 billion are without access to electricity and 2.7 billion are without clean cooking facilities. More than 95 per cent of these people live either in Sub-Saharan Africa or developing Asia. What needs to be done before they, too, have access to a supply of energy, and what form must it take if it is to be sustainable? Or should sustainability play no part in the supply of energy to the poor?

The fact is that the first decade of the 21<sup>st</sup> century saw a renaissance of coal: in that period global demand for coal rose by 55 per cent. With a share of 40 per cent, coal continues to be the backbone of global electricity generation, although half of new energy production capacities in 2010 were already based on renewable energy sources. Despite this, renewables account for only 16 per cent of global final energy consumption. The IEA esti-

mates that USD 48 billion will need to be invested annually if universal modern energy access is to be achieved by 2030. But in 2009, according to the IEA, only USD 9.1 billion was invested in providing household access to electricity and clean cooking facilities. The largest share of the funding came from multilateral organisations (34 per cent) and domestic government finance (30 per cent), followed by private investors (22 per cent) and bilateral development cooperation (14 per cent). So where are the missing resources to come from, and who, in particular, has a duty to foot the bill?

In 2010 USD 409 billion was spent globally in subsidies for fossil energies. This subsidisation does not make economic sense, because it restricts economic growth in the long term by having a detrimental effect on efficient deployment of resources. A common argument for fossil energy subsidies in developing countries and emerging economies is that they improve the living conditions of poor population groups by giving them access to a basic energy supply. Yet this argument has been adequately rebutted: IEA calculations, for example, show that in 2010 only 8 per cent of (consumption) subsidies for fossil energies, or USD 33 billion, benefited the poorest 20 per cent of the population. In such countries as South Africa and Sri Lanka the figure is, at just over 2 per cent, even lower. Those who benefit tend to be population groups with higher incomes, since they usually consume more energy. For effective poverty alleviation instruments should be used that target the poor more accurately. Fossil energy subsidies are, then, unsustainable not only ecologically and economically, but also socially. And at a time of rising energy prices they are growing items in national budgets. Moreover, subsidies for fossil energies usually have no fixed expiry date, unlike the temporary measures taken to promote renewables. Fossil energy subsidies are thus both a growing and a long-term burden on national budgets.

To provide universal modern access by 2030, cu-

mulative investment of USD 1 trillion is required. The IEA estimates that bi- and multilateral development cooperation will have to provide USD 18 billion a year until 2030, the private sector and the developing countries themselves USD 15 billion each. To mobilise the necessary government resources in the developing countries and emerging economies, the first step towards *Sustainable Energy for All* must be to reduce subsidies for fossil energy sources. The resources released in this way should be invested in increasing access to energy through, say, the expansion of energy infrastructure in rural areas and measures specifically designed to support poor population groups. It will also be essential to ensure legal certainty and to create favourable investment conditions in the energy sector to mobilise the investment required of the private sector. An example of the creation of a sound environment for private investors is the introduction of declining feed-in tariffs for renewable energy sources. However, this calls for the development of a strong regulatory framework by policy-makers. Bi- and multilateral donors can

lend their support in this respect by pressing for and helping to fund the promotion of greater private-sector involvement and by proposing appropriate business models.

At their Pittsburgh and Toronto summits the G20 countries committed themselves to reducing subsidies for fossil energy sources. In 2010 almost half of all countries that subsidise the consumption of energy from fossil sources undertook or at least announced reforms of their energy subsidies. In the world as a whole, however, there has been no lasting reduction in energy subsidies in recent years. Quite the contrary. Owing to the Arab Spring subsidies in the Middle East and North Africa have become very much more widespread. The International Year of Sustainable Energy for All is a good opportunity for all countries of the international community to set themselves sustainable goals in their energy policies and to demonstrate how seriously they really take a socially, economically and ecologically compatible energy supply for all.



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