



# *Geopolitics of Energy*<sup>®</sup>

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## *Inside Geopolitics of Energy*

### **Special Issue - Energy Poverty and Development**

A compilation of articles from around the globe assembled by:

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# **Conversation with Fatih Birol\***

Interview Conducted by Antoine Halff

**Antoine Halff** – Fatih, if anyone could take credit for single-handedly putting energy poverty on the energy debate and policy map, that would be you. In 2005, when the International Association for Energy Economics gave you its award for Outstanding Contributions to the Profession at its annual conference in Taiwan, you turned your acceptance speech into an impassioned plea to make room in the agenda for that important field, which was then grievously neglected. Then you proceeded to answer your own call. This year's World Energy Outlook features a special excerpt on energy poverty, which was unveiled earlier this year at the UN General Assembly on the Millennium Development Goals. In the condensed format that is a hallmark of the WEO, it ticks three boxes: it takes a headcount of the energy deprived, it puts a dollar figure on remediation – how much universal energy access would really cost – and it gets the conversation started on the best course of action – how to go about financing universal access. That issue was jointly produced by the IEA with UNDP and UNIDO. That's quite a bit of achievement and institutional recognition for an issue that was virtually virgin territory just five years ago. What did it take to go from point A to point B?

**Fatih Birol** – Actually, it took a bit longer than that. We've been pushing the poverty agenda in the WEO since 2002. To be frank with you, when we first wrote about it, the reception was far from enthusiastic. We've received a lot of glowing feedback about the WEO over the years, but of all the things we've been writing about, our work on energy and the poor is not what got the most positive comments. At many international meetings, the subject drew blank stares. Still we insisted. We stubbornly highlighted the link between energy poverty and the top two global energy issues of our time, energy security and the environment. We understood there was a linkage between access to energy, economic and social development and all the other issues that keep us awake at night, be it stability, moral issues, social issues, etc. Suddenly, after eight years of pushing the agenda, we see a momentum is building. At many international meetings, energy poverty is now part of any conversation about global energy issues. It's become a sort of third column of interest for IEA member countries and others. Our shareholders really have started to see this as one of the global energy challenges. This newfound awareness, new sensitivity to this problem and its global implications is not limited to the OECD and IEA member countries. Awareness is also rising in the very countries where the problem exists, as well as the developing countries that have managed to put the problem behind them, such as China.

What held people back initially, what made them so reluctant to put the issue on the agenda, was the common misconception that universal energy access would place an unbearable burden on the economy and the environment. People were concerned that fighting energy poverty and pushing for universal access to modern energy services would mean an explosion of energy demand and greenhouse gas emissions. In fact, our research shows the increase in CO<sub>2</sub> emissions would be less than 1%. Oil demand too would rise by less than 1%. Peanuts! There were many myths out there about the implications of universal energy access. We were able to destroy them.

**AH** – It's easy to see why the IEA would seem to be an unlikely advocate for universal energy access. When the organization was set up in 1974 as a club of top oil consumers, all advanced, industrialized economies, extending energy access to the third world was not on its radar. It's a credit to your powers of persuasion that the linkage between poverty and the IEA's core missions, such as energy security, has become widely accepted. Given the neglect in which this issue was held for so long, what personally alerted you to it and motivated you to make reducing poverty the IEA's business?

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\*Fatih Birol is chief economist of the International Energy Agency and responsible for the *World Energy Outlook*. The *World Energy Outlook 2010* is scheduled to be released on November 9, 2010 in London. A special early excerpt, *Energy Poverty: How to Make Modern Energy Access Universal*, was released on September 21, 2010 at the UN General Assembly on the Millennium Development Goals.

**FB** – This is an issue with which I have also a very personal connection. I come from a country, Turkey, where this was long a major problem. Turkey's access to electricity is a very recent story. Not too long ago, 20% of Turks relied on traditional biomass for cooking – things like firewood or animal waste. I grew up in Ankara, but in my childhood I spent a lot of time in the countryside. There, traditional biomass was just a fact of life. As an economist I have a hardwired sensitivity to this issue and I made it my mission to help others escape this plight. We all have different definitions of energy security, based on our circumstances. If you're Japanese, the first thing you think about when you hear energy security is oil. In Europe, it's gas. In Africa, it would be access to electricity and modern energy services. I believe, because of my own personal history, I am particularly sensitive to the link between all these aspects of energy security.

**AH** – The WEO is very explicit about the methodology used for assessing the scope of investment needed to bring energy access to the poor, the underlying assumptions about the minimum level of energy services that would be sufficient to break to poverty trap. Could you shed some light on how you arrived at your headcount of the poor in the first place?

**FB** – Our methodology is a bottom-up, country-by-country approach that draws from as many data sources as we could identify from national, international and regional organizations, with a lot of back-and-forth with government, international organizations, industry and academe. Take a country like Tanzania. We started from the census, we looked at data from the African Development Bank, the World Bank, national authorities and other sources. When the WEO was published on 9 November, all the underlying data will be made available on the IEA website. Once, at a meeting I was attending eight or nine years ago, the CEO of a major European electricity company mentioned that there were millions, even billions of people without access to electricity. From that moment, I decided that we needed to get to the bottom of it – to study the problem and find out exactly how many billions of people were actually deprived of electricity. We were the first to take up this issue. Now our numbers are accepted and used all over the world.

**AH** – Your special excerpt of the WEO on energy poverty is a joint effort with two major UN agencies, UNIDO and UNDP. For the IEA, the benefits of such a partnership seem clear. On the one hand, while the issue of energy and development is not enshrined in the IEA's mandate, development is what UNDP and UNIDO are all about, so bringing the two together makes perfect sense. It also brings a lot of muscle to the IEA's efforts. But isn't there a downside? After all, taking pot shots at international organizations is a popular sport, but doesn't a huge bureaucracy like the UN have a lot more detractors than a comparatively nimble, tightly focused one such as the IEA?

**FB** – Working with the UN has been hugely beneficial in terms of bringing our message to a much wider audience than we typically can reach from the IEA platform. From that point of view it's been totally worthwhile. But I've been really disappointed that the UN didn't include energy in the Millennium Development Goals. I think it missed a very important opportunity by failing to recognize, at the time, how critical energy access was to ensure that other targets, such as health, sanitation, water issues, etc, could be reached. Thankfully, there is much better awareness of these issues at the UN today, which is a testament to how effective we have been in pushing the agenda. But the train has left the station and the time to formally include energy in the broad UN development goals is gone. That's a pity.

**AH** – By definition, all IEA countries belong to the OECD and thus abide by certain governance standards. But extending energy access to the poor means dealing with non-OECD economies where governance standards and the business environment can leave a lot to be desired. Now that you have come up with a cost estimate for universal energy access, can the funds be effectively disbursed without first fixing those governance problems? And even if one accepts that universal energy access is part of its mission, is the IEA really equipped to deal with those thorny and controversial governance issues?

**FB** – Governance is beyond our current mandate, but that doesn't mean others can't touch it. We just need to get the ball rolling. But the hurdles may not be as forbidding as they seem. In oil and gas exporting countries, for example, it wouldn't take much – in financial and revenue management terms – to achieve full energy access. In many West African energy exporting economies, it would cost less than 0.5% of oil and gas revenues to bring electricity to the entire population – compared to just about 50% of the population with electricity access today. To be frank, I see in many West African countries that there is growing awareness of this issue.

Non-OECD countries are not just part of the problem. There are non-OECD success stories, emerging countries where energy poverty has been successfully eradicated. They must be part of the solution not just at home but also in other economies where the problem endures. China is a case in point. In some 10 years, it has managed to lift 500 million people out of energy poverty. It didn't think of the market and made the Chinese people prosperous and happy. Many countries can learn from its experience. China itself is proud of its accomplishment. In many international meetings, it is happy to share its experience with others. But countries like it should also take a leading role in helping develop the financial tools and solutions to bring energy access to countries that continue to suffer from severe energy poverty.

Markets alone can't solve everything. Dogmatic trust in the market's power to solve the problem of energy poverty risks pushing back a solution by a number of years. There should instead be a combination of different factors: international aid, regulation, reform of the energy markets in the countries afflicted with widespread energy poverty, issues of governance. The interplay of these factors, how they all come together in the context of the different countries that suffer from endemic energy poverty needs to be studied. Our numbers show the level of investment needed to bring basic modern energy services to 1.4 billion people who currently don't have access to them. What we now must find out is what kind of financial mechanisms are needed to bring electricity to these people. How can those mechanisms be tailored country by country to match each economy's unique set of needs and circumstances? What kind of innovative financial solutions can be found? Awareness is behind us. Financing is the next phase.