

# Sustainable Energy for All



The United Nations General Assembly has declared that 2012 is the International Year of Sustainable Energy for All. The resolution was passed in August 2011 and may in part have been influenced by events at Fukushima in Japan and the need to promote new and renewable sources of energy. All the right phrases are in the declaration. We need to transform the global energy system to provide energy for all, to satisfy the growth in demand and to diminish the negative impacts of climate change. But satisfying the growth in demand is not going to be easy. Shifting to renewables from fossil fuels, though essential, will need to be accompanied by a decline in energy consumption through increased efficiencies and energy savings. This may require a significant cut in per capita energy use in the developed world, in order to accommodate the increasing per capita energy use in the developing world as poorer communities become connected to energy grids.

The importance of shifting to renewable energy and increasing energy efficiency has been advocated by many groups for decades, starting with Amory Lovins at the Rocky Mountain Institute and his 1976 article entitled “Energy Strategy; The Road Not Taken.” More recently, others have argued the case for reduced energy consumption in the developed world including the 2,000 Watt Society in Switzerland and the Low Carbon Society in Japan. They argue that we can have a convenient and comfortable quality of life while using much less energy than we do today.

However, calling for a reduction in per capita energy use is seen in some quarters as equivalent to calling for slower population growth across the world — it’s taboo, a political “no-no”. You can’t expect people to use less energy because that would involve lifestyle changes. No one wants to give

up their flat-screened TV, game centre, personal computer, fridge, electric cooker, microwave, etc. Instead the expectation is that we just make these devices more energy efficient. But the challenge would be to reduce our energy consumption to about one fifth of what we are each using today while still keeping all our stuff.

And what about the impact on the economy? Electricity generating companies don't want consumers to use less electricity. It means smaller profits and less funds for investment. Industry doesn't like the idea of cutting energy use as well and is quick to tell politicians that such measures will cripple the economy. So we find ourselves stuck in a scenario where the only option on the table is continued growth in energy demand and supply.

## Energy for all – how do we get there?

For many readers of Our World 2.0, who are concerned with issues like the peaking of global oil production, the central worry is that this phenomenon will also undermine our current quality of life. Some, like those involved with the [Transition Movement](#), have worked through these issues and also take into consideration the positive aspects of a life with less oil (such as the renewal of communities and the localization of food production).

I would suggest that one issue that rarely plays on our minds in the developed world is the fact that 1.4 billion people in the world today live without electricity (mainly in the rural areas of Sub-Saharan Africa and South Asia). Further, 2.5 billion people still depend upon biomass for cooking. How can we change this situation?

In response to this challenge, the UN, through this International Year of Sustainable Energy for All, is calling for the formulation of a global energy strategy. For the developing world, the goal would be to provide universal access to modern energy services by 2030, while at the same time promoting renewable energy.

This could be achieved through four main objectives. First, products designed to address the needs of the poorest segment of the population would be developed. Second, the costs of rural off-grid technologies (micro hydropower, biomass gasifiers, household wind turbines, village-scale mini grid and solar home systems) would need to be reduced to make them competitive. Third, we need to find ways to lower energy costs for the target population. Fourth, better, more supportive technical cooperation is required to allow the creation of stable markets for renewable energy in rural areas in the developing world. These are all noble and essential goals. They all have to be implemented.

## But is the UN fit for purpose on global energy strategy making?

In the declaration, emphasis is placed on the Rio +20 summit (officially named the UN Conference on Sustainable Development 2012) as the primary venue where efforts will be made to strengthen the global institutional framework for the promotion of renewable energy.

The central problem is that when it comes to energy, the mandate of the UN is weak. The declaration makes mention of the UN Secretary General's Advisory Group on Energy and Climate Change created in 2009. The group's report, issued in April 2010, formed the basis for the discussions in the General Assembly that led to this International Year being designated for 2012. The challenge is to take the group's recommendations forward into action and real change. Where will the necessary financial resources come from?

The UN can play a leadership role and this will involve better coordination between UN bodies. To take this forward, there is something called UN-Energy, an inter-agency coordination mechanism that undertakes studies and identifies various goals. This group generates knowledge, but has limited powers or resources to bring about change on the ground. The same also applies to the Intergovernmental Panel on Climate Change (IPCC) and the UN Framework Convention on Climate Change that both elaborate on how climate change and energy issues can be approached in a holistic manner.

The real power to alter the structure of our global energy system outside of the developed world lies in the hands of the international finance institutions like the World Bank, the Asian Development Bank and other development financing bodies. But the World Bank's record of lending to developing countries to invest in energy projects is mixed. For example, as mentioned in the International Year of Sustainable Energy declaration:

“The World Bank Group provided loans for the energy sector totaling \$13 billion during 2010. Lending for low-carbon energy projects and programmes reached a record of over \$5.5 billion.”

The remainder, one would guess, is for high carbon energy projects.

Another new but still minor player is the International Renewable Energy Agency (IRENA) headquartered in Abu Dhabi and established in 2009. Its role is to promote the adoption of renewable energy but mainly through information dissemination.

As we discussed before on Our World 2.0, by far the biggest players in the global energy sector are the International Energy Agency (IEA), which brings together countries in the Organization for Economic Cooperation Development, and the Organization of the Petroleum Exporting Countries (OPEC). When it comes to oil, you can also divide these two groups into consumers and producers. This still leaves out the other major economies — China, Brazil, India and so on, as well as the entire developing world.

## Including peak oil in a global energy strategy

Any global energy strategy really needs to bring the players listed above together and the goal should be to formulate an energy descent plan, something akin to an oil depletion protocol, that stipulates how countries jointly manage oil depletion. .

Generally you will find that the UN does not refer to peak oil in its documentation but rather prefers the term energy security. This has led commentators like [Sharon Astyk](#) to question why the UN does not consider energy depletion. She argues that “[t]here is, at this moment ... no comprehensive UN study on energy resources and their future. This is both a shame and a scandal — we are preparing for the coming century without a clear picture of the real problems that beset us.”

Astyk argues that “we must prepare for a less-globalized, not more globalized society, and one struggling with new poverty in new places as climate change and peak oil come together. Human rights of all sorts will be affected by the changes that are coming – if we do not wish to lose gains because we are surprised by depletion, we must prepare to hang on to them in a lower energy society.”

She would like to see the UN take a leadership role in relation to energy depletion. This is because the UN “is one of the most powerful organizations in the world influencing international policy... their work informs how governments and NGOs address a host of issues from women’s rights to civil conflict, from water resources to world hunger.”

So for Astyk it is essential that for the UN to “understand the energy and resource picture more fully and to incorporate it into all of its committees. Just as climate change will transform our society, so will peak oil — and we know far too little about how.”

## So what to do in 2012?

If we seriously want to respond to the global energy challenge, including preparations for the onset of peak oil, the best way forward may be to set up something like an International Taskforce on Energy Depletion and Energy Access for All. The two must not be seen as contradictory.

This taskforce could meet at Rio +20 and bring together all the key players mentioned above — the relevant UN agencies, the World Bank and other financing institutions, IEA, OPEC, IRENA and other interested parties like the IPCC, the large energy companies and international NGOs.

One important meeting is the [World Future Energy Summit](#) in Abu Dhabi in January 2012, which will mark the official launch of the International Year of Sustainable Energy for All, and includes an impressive list of speakers and many of the key players. The World Future Energy Outlook that will be issued at the end of the summit could be a useful document. Fatih Birol, chief economist with the IEA and one of the only officials to talk openly on peak oil, will be there as a keynote speaker to relay his concerns. Perhaps several members of the [Association for the Study of Peak Oil and Gas](#) will also be present in Abu Dhabi to participate in the discussions, including many who consider that we have already traversed the peak. Lets hope the discussions prove fruitful.

One goal in 2012 should be for the international community to get the clearest picture possible of our energy predicament. All the relevant energy data sources should be presented and reviewed at Rio+20 including those from the IEA, the US Energy Information Administration and the BP Statistical Review of World Energy. Forecasts of future energy trends should be shared with all the

data and assumptions made open for others to analyze. Studies like the UK Energy Research Centre's 2009 report on global oil depletion should form required reading for all participants.

Could 2012 then be the year that the international community finally comes to terms with the realities of the energy challenge we face and decides to take action multilaterally?

“That’s never going to happen,” you may think. Just look at what happened at the climate negotiations in Durban, South Africa. COP 17 means that it is the 17th year that the parties to the Climate Convention have been negotiating. If countries can’t agree on what they should do in order to prevent runaway climate change, how can they ever agree to cooperate on a global energy strategy? It’s quite reasonable to think that way.

Yet, the truth is that even just the organizing of such a taskforce meeting at Rio +20 as described above would play a major role in awakening the leaders of the world to the reality of our energy predicament that they can (and do) currently conveniently choose to ignore.

Moreover, this energy issue, through high oil prices, lies close to the heart of our financial and economic problems, and keeps us in recession. It also lies at the heart of how we can begin to move towards a future with less energy, to a greener economy, to the provision of energy for all and to the eradication of poverty. On the latter, this International Year of Sustainable Energy for All is right on target by linking energy with these other challenges. But we will only begin to move forward in the right direction when we appreciate that our energy future is constrained and plan to manage those constraints accordingly.

We can get this badly wrong and find ourselves scrambling over the remaining energy resources. The consequences of such a divisive reaction will be dire.

Or we can move now, in cooperation, to focus on improving the quality of life for all, with the finite energy resources we have, without messing up the climate. What would you like to see happen in 2012?

**Source: <http://ourworld.unu.edu/en/sustainable-energy-for-all>**