

Event Report Sustainable Energy for All (SE4All): a new framework for global development

Panel Discussion, Tuesday, December 17th 2013, 5pm-7pm

Springerschlößl, Tivoligasse 73, 1120 Vienna

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Keynote: Susan McDade (SE4All)

<u>Panel:</u> **Leonardo Barreto-Gòmez** (Austrian Energy Agency); **Hannes Bauer** (Expert Sustainable Energy, Austrian Development Agency); **Wolfgang Moser** (Head of Unit VII.5d Development, BMeia)

An event of the Institut für Umwelt – Friede – Entwicklung (IUFE). in cooperation with "Allianz für Klimagerechtigkeit", PolAk. Sponsored by: Österreichische Entwicklungszusammenarbeit (ADA), Bundesministerium für Wirtschaft, Familie und Jugend (BMWFJ) sowie dem Lebensministerium (BMLFUW). An audio podcast of this event and other events of the IUFE can be heard or downloaded for free on the website: http://iufe.podspot.de

Keynote by Susan McDade (SE4AII):

What are the energy challenges? If you have no energy, the first challenge is simply to get some. Between 1.6 to 3 billion people in developing countries have this main challenge and they are most concentrated in Subsaharian Africa and South Asia. The second challenge is how to create economic growth with increased energy use, but not in a way, that is inequitable. The final challenge is reducing global emissions. In general there are two world views, which can be described as "energy - I want some" and "energy is a bad thing, because it is causing climate change."

That is why the actual partnership aims to move forward on an environmental sustainability frame, a social justice frame and an economic growth frame, because is politically impossible to tell people of developing countries, that they cannot have the aspiration of quality of life in the sense we have in northern countries.

SE4All was launched by the secretary of UN before Rio+20 conference in 2011. It has 3 explicit global goals to accomplish by 2030:

- 1.) to ensure universal access to modern energy services
- 2.) to double the global rate of improvement in energy efficiency
- 3.) to double the share of renewable energy in the global energy mix

A lot of changes are happening on energy system. Badly the issue is still not achieving the critical mass, while about 2,6 billion people cook on fuels, wood, charcoal or droppings of animals for heating, which is related with over 4 million deaths per year (especially women and children). This means that more people die on the consequences of unhealthy cooking methods than on malaria and HIV together.

But no energy goal can be found in the millennium goals framework. It was not forgotten, but no global political consensus could be found. Now it is extremely necessary, that energy issues are in the Post-MDG-framework, starting 2015. A global sort of political motivation has been going on and a global e-dialogue with thousands of NGOs put water and energy as the key topics. Now the UN general assembly has declared the next decade, starting 2014 as decade of "Sustainable Energy for All", which gives the matter a big political push, though we will not know the results until the last quarter period of 2014.

Additionally the initiative defined four targets in a "Nexus", that tries to explain, that you do not produce energy for the sake of energy. So energy means to reach the following goals:

1.) Health: You cannot prevent women dying from birth death in the dark, without hygiene, transport, feed or monitories, boiled water, nurses and doctors in the rural areas.



- 2.) Water: For transport, lifting, purification and management. The whole water challenge is directly related to energy.
- 3.) Food: Basically for cooking, because most of the basic calories for people all over the world come from grains that must be cooked, but also for processing, harvesting, transport and storage.
- 4.) Women: For economic empowerment, participation on modern society, and their access to schools.

Now there are two equally important, but very different ways of approaching access to energy: One way is on a large scale with great need for heavy infrastructure investment: "Whole-scale" energy that is financed by multilevel development banks, like the World Bank or regional banks, which are able to give credits in amounts of millions for power sector grid extensions.

Equally important, and maybe more important for low-level energy, are bottom up solutions, as specific services at retail level, e.g. selling solar water pumps, LPG gas, battery recharging, solar lanterns, small household tv-systems and mini grids. The way of financing those and finally reaching the consumer is a complete different. In top down grid sector there is no consumer. You sell to an utility, that is responsible for how to get the energy to the consumer. In many cases it is hard to measure, if energy that gets to the wire also gets to the household too – often not, because the households cannot afford it, or there is in general no connection. So there are different scales of energy and different ways of financing them. The very issue is, how to move away from coal-generated base load and petroleum, not only because of environmental instability.

Many countries and companies declared to work with SE4All on specific topics, such as: Clean cook stoves, reducing gas flaring, an electrification road map for Southern Africa.

The structure of the Global Tracking Frameworks can be found within the presentation slides on the IUFE-Website.

Panel Discussion: Wolfgang Moser (Head of Unit VII.5d Development, BMeia)

In the austrian Ministry of Foreign Affairs, energy gradually became an extraordinary issue around 2000 when Rio+20 evolved and water and energy was on the EU agenda as well. This could be called the "kick start", when activities started. 2006 the first energy facilities were established, which set up in Brussels with Austria already engaged. NGOs and private companies participated in the first call for proposals. 2010 the first high-level ministerial meeting in Vienna took place, where 20 african energy ministers met three commissioners and about eight european development ministers in the Hofburg. While the conference, energy objectives were arranged for the first time, which included: bringing energy access to 100 million people in Africa by 2020. Further objectives wanted to support hydro-, wind- and solar power as well as energy efficiency and also doubling the amount of gas exchange between Western African countries and also to Europe. Now a second high-level meeting in Addis-Abeba is running up. By doing so, Austria learned to involve not only governmental stakeholders, but also the privat sector, NGOs and the academia. A first stakeholder meeting in Cape Town took place last year with over 300 participants from all over Africa and Europe. The momentum was developed bilaterally.

It is important to involve decision makers on a regional level. There are austrian engagements and interests in ECOWAS, SADC and the East-African community. The first success of UNIDO has been the involvement on the Renewable Energy Cooperation Centre of ECOWAS for 15 countries placed and based on Cape Verde Island. From there, a regional network has been set up, that is contacting stakeholders in the 15 member states. The vision of replicating this idea in other regions of Africa has emerged. To Wolfgang Mosers very surprise, recently requests also from pacific and caribbean regions were submitted to establish such regional sustainable training centres on-site. This is a chance to attain major objectives of SE4All while working hand in hand with new people. Another big issue is to



monitor processes. If you want to reach 100 million Africans, you must prove of how to do this. Therefore UNIDO developed a monitoring instrument together with the World Bank, involving FAO, IEA as well. So the establishment of Renewable Energy Regional Centres is one of the activities how you can really achieve outputs on the energy access side, because you're engaging stakeholders and are trying to engage also enterprises in the regions, which has been a little bit of an Austrian idea.

At the end of the decade on "Sustainable Energy for All", called by the UN, Wolfgang Moser wishes to see a reduction of migration and a reduction in population growth. Something positive could be done, if the inner migration from countryside to towns could be stopped. He also would like to see more economic activity and power within the families.

Susan McDade (SE4AII)

One of the things that makes energy so difficult is the different understanding what energy actually is. Is it that lightning bulb, a visual system, the underground train or the room heated? What is energy service, carrier and source? The complexity makes it very difficult for development cooperation, intergovernmental negotiation and politics to achieve agreements. At least there is a need for capacity building in every region. Therefore you need people who understand these on a technical, policy and financial level. These centres, mentioned before, are important to bring best practises and engage trainings. People from industrialized countries getting onto plane, flying to India or Africa, explaining something and rewind, is not accurate to solve any problem and even unethically.

On the one hand you need a transfer of knowledge, which creates good practises and supports capacity building. On the other hand you need the ability of these centres to just convey different groups together to talk about the key things, and why they are not happening. Often they are not happening, because you cannot do it without policies, banking mechanisms and de-centralized structures. The question is not only if it is just a good idea and economic lucrative. It is also important, how to do it. Who gets the benefits? What are the incentives? Those are things, which are not intuitive. A simple example of Western Africa could be changing the light bulbs for free. But how do you get it out of the regional economy: Through prices, through regulation or through distribution? Those are very concrete things and there exists a high demand in knowing how other countries do this. Finally Susan McDade wishes that the first year of the Sustainable Energy for All decade will focus on the theme of women and energy. At the end of the decade she hopes, that she will not be sitting in conferences saying, that one third of humanity does not have access to the level of services that she and her kids have access to. Looking forward to her children's life hopefully everyone will have access to a basic level of energy. Probably be will use a lower or different level of energy than now, because the way we consume is not sustainable.

Leonardo Barreto-Gòmez (Austrian Energy Agency)

The Austrian Energy Agency (AEA) was first involved in Eastern Europe, what was kind of a natural development in their perspective. Over the last years they got more and more involved in the developing world as well, such as the Western African region. It is a pleasure to be able to do some know-how transfer on areas where Austria has strengths, but also to learn from developing countries. Leonardo Barreto-Gòmez personally sees four main areas that require development:

Appropriate ethic technologies are needed, involving and training local people, to develop suitable policies and getting people on the ground to be able to assemble, store, repair and maintain systems. Therefore you need international and local companies and on policy side, developing frameworks and standards as well. Western Africa seems to have a problem with minimum standards. They have very old-fashioned, often repaired and second hand appliances from the second world. With regional standards and a critical mass the whole



region could be strong together and acquire appropriate facilities more successfully. Moreover local actors and those who have ownership are necessary as well as business models. These get more and more important to present the business case. Then you can inquire at large financiers with maybe not one, but 1000 small projects.

The AEA also hosts the Vienna Energy Forum, a platform, where they want to reach Austrian NGO's and companies to try and export options for sustainable energy.

His most important wish for the end of the starting decade on Sustainable Energy for All is to improve the situation of the people on the ground. On the other hand he would like to see that developing countries take this problem in their hands, and will say in some points, that they now stand on their own feet and are able to develop this issue.

Hannes Bauer (Expert on Sustainable Energy, Austrian Development Agency)

There were several projects which are finished. But it is important to find ownership and sustainability for a long-time-area. The start of the regional embedded-centre (Centre for Renewable Energy and Energy Efficiency – the last term is very important for Hannes Bauer and must not be forgotten), tries to distribute regional policies to 15 member-states of Western Africa. A new contract was signed on 13th of December with East-African countries for UNIDO, another one for South-African areas, so that two new regional centres, concluding 34 countries, will start in Summer or Autumn of 2014, hopefully with the same success as the one in Western Africa.

Hannes Bauer also worked with Bhutan to provide knowledge for hydro power. In cooperation four hydro power plants could be established and 93 % of the rural population do now have access to electricity, while all have in urban areas. But after 15 years of cooperation, also for Bhutan, still renewable energy generation is most important, not energy efficiency! So awareness-raising is needed for governments and people who are responsible. He also requests that the SE4All-Campaign should have a closer focus on solar thermal energy. Power in development discussion is mostly electricity, such as solar energy is mostly photovoltaic. He locates a gap here, because you need a lot of heat as well (e.g. for laundries, hospitals, schools or the food industry). The Austrian Development Cooperation has a guite successful initiative in Southern Africa countries (SADC) including Austrian knowhow of energy. The biggest solar thermal energy plant with a capacity of 25 MW was built two years ago in Saudi-Arabia for a university with 50.000 female students, with Austrian components and engineers. So Hannes Bauer reasons that solar thermal energy slowly becomes mainstream. In meetings with World Banks over the last years, solar thermal has not been on the agenda. Neither has there been any global player for this technology. So we need to use not only power. There is a double rate of sunshine in most African countries comparing to Austria – and the solar thermal technology is working here too.

The third main point is the working "Nexus"-area, which shows the interlinkages between water-, energy- and food security. Hannes Bauer is very glad that this is an important issue in SE4All, which has of course much more global prospects than Austria has. He is also very glad that SE4All looks on gender, health and climate change issues as well. Actually a new guidance document for these nexus interlinkages between water, energy and food security is in progress, including two case studies in Burkina Faso and Ethiopia. He sees close cooperation with SE4All particularly in the "Nexus"-area, solar thermal energy, energy efficiency and regional centres.

At the end of the Sustainable Energy for All decade he wishes, that women and children has access to clean cooking facilities, that does not endangers their health. He doubts that the 2030-goals are realistic, but it's good to have them anyway. Finally the energy level in developing countries has to rise, while the energy level in developed countries must fall. In developed countries we have to look for another kind of wealth, sustainability and fun, which does not need electricity all the time. The kids do not go out into nature anymore and nature in general declines.

(Christoph Reithofer, IUFE)