Joint IRENA-RETD workshop: Recent energy sector developments and their impact on renewable energy prospects

29 June 2011, Bonn

Final version

A number of on-going activities focus on scenarios and the prospects for renewable energy (EMF, IPCC SRREN, IPCC AR5, IEA RETD, REN21). The typical approach is to collect documented scenarios and assess the range and robustness of outcomes. Because only documented and reviewed scenarios are considered, and the publishing process takes time, there is usually a time lag of a couple of years between original assessment and publication of the meta-analysis, which limits the relevance of the outcomes for policy making.

The mentioned time-lag is an issue as six key energy policy issues have emerged in the last year that may significantly affect the prospects of renewable energy in the short and long term, such as:

1. Widespread recognition that unconventional gas may be available in very significant quantities worldwide, such that low natural gas prices are here to stay. In certain markets, such as the United States, this has already resulted in a slowing of renewable energy uptake. Environmental implications are not yet on the agenda.
2. Following the Fukushima accident, nuclear power is being reassessed in many countries. More safety features are likely to raise the cost of new reactors further. A nuclear renaissance may be delayed or perhaps stopped altogether.
3. The price of oil has again risen above USD 100/bbl and is very volatile. Opinions differ as to the causes, but regardless of the explanation, higher oil prices may be here to stay for the longer term, which would benefit renewable energy solutions for transportation and use of biomass as feedstock for synthetic organic materials. It is unclear if gas prices will decouple from oil prices.
4. On the technology side, solar photovoltaic (PV) prices continue to fall rapidly, and PV has reached grid parity in parts of the world with favourable conditions. CSP total cumulative capacity is still below 1 GW but rapid expansion is foreseen, which will result in substantial learning. CSP with storage may serve as base load. Further cost reductions are likely which will open up huge markets in the coming decade. Goal is to explore the impact of these developments on the global renewables outlook.
5. Unclear prospects for climate policy, possibly a Durban outcome consisting of independent initiatives instead of a single emission target. Prospects for CDM are unclear, some kind of target for renewables may emerge.
6. The security of supply issue has become even more prominent due to the risen political uncertainty in oil supply countries. Costs for security of supply are not adequately represented in energy scenarios.

Goal of the workshop is to discuss the impact of these six drivers on energy scenarios for the period 2015-2050 and its possible implications on renewable energy outlook and policy needs in

the short term. Key modelling groups will be invited to present their latest insights in this field, to assess their impact on renewable scenario outlook and to map new scenario and strategy needs that emerge from these policy challenges.

Output: Workshop proceedings consisting of executive summary of discussion (4-5 pages). Chatham house rules apply.

Date: Wednesday 29 June, 9 AM-5 PM

Location: IRENA Innovation and Technology Centre, Robert-Schumann-Platz 3, D - 53175 Bonn Germany

Access: Airport Cologne-Bonn (taxi or Bus to Bonn, 30 minutes) or Airport Frankfurt (train to Bonn-Siegburg, 45 minutes, direct tramway access to Robert-Schumann-Platz).

Hotels: Maritim (next door) http://www.booking.com/hotel/de/maritim-bonn.en., Gustav-Stresemann Stiftung (5 min by foot) http://www.gsi-bonn.de/, Continental (city centre 15 min) http://www.booking.com/hotel/de/continental-bonn.en.

Agenda:

9: 00	Opening/welcome co-chairs and background info	Hans Joergen Koch, RETD Dolf Gielen, IRENA
	Session 1: Global Scenarios and Issues	Moderator: Hans Joergen Koch
9:15	Presentation: IPCC SRREN and AR5 preparations: Latest renewables scenarios insights	Elmar Kriegler, PIK
9:45	Intervention 1: Industry perspective	Stefan Gsaenger, REN Alliance
10:00	Intervention 2: NGO perspective	Eric Martinot, Institute for Sustainable Energy Policies (Tokyo) /REN 21
10:15	Discussion	
10:30	*Break*	
	Session 2: Recent key policy issues	Moderator: Bernhard Milow
10:45	Unconventional gas prospects and the renewables outlook	Mackay Miller, NREL
11:15	Recent cost reductions for solar and their impact on the renewable energy outlook	Carsten Hoyer-Click, DLR
11:45	Unconventional gas and solar outlook	Kees van der Leun, Ecofys
12:15	Intervention: Recent oil and gas developments and their impacts on renewables	Simon Mueller, IEA
12:30	Intervention: Nuclear prospects post-Fukushima and impacts on renewables	Holger Rogner, IAEA (via video)
12:45	Intervention: Water constraints for CSP development	Paul Komor, Univ. of Colorado
13:00	*Lunch*	

	Session 3: Renewables scenarios wrap-up	Moderator: Dolf Gielen
14:00	CLEW: Integrated energy, water and land use modelling	Sebastian Hermann, KTH
14:15	Latest insights from ETSAP studies	Amit Kanudia and GianCarlo Tosato, ETSAP
14:30	Discussion	
	Session 4: Renewables scenarios for policy processes	Moderator: Dolf Gielen
14:45	A broader market approach on perception and realities of energy costs	Matthew Kennedy, RETD
15:15	Intervention: Impact analysis of additional R&D efforts from the SET plan	Tobias Wiesenthal, EC DG JRC
15:30	Intervention: UN 30/30 target analysis needs	Morgan Bazilian, UN Energy/UNIDO
15:45	Intervention: Climate policy outlook and consequences for renewables	Andrew Higham, UNFCCC
16:00	Intervention: RIO+20	Alex Roehrl, UN DESA (via video)
16:15	Intervention: Energy revolution scenarios: next steps	Sven Teske, Greenpeace
	Session 5: General discussion	Moderators: Hans Joergen Koch and Dolf Gielen
16:30	General discussion: Consensus regarding impacts on the renewables outlook and the need for more detailed analysis.	
17:00	*Closure*	