



Short communication

Renewable energy in international and regional governance: Propelling development in Africa

Irene Giner-Reichl^{a,b,*},¹^a Global Forum on Sustainable Energy, Austria^b REN21 Steering Committee

ARTICLE INFO

Article history:

Received 12 December 2014

Received in revised form

15 December 2014

Accepted 18 December 2014

Available online 14 January 2015

Keywords:

Energy

Global governance

Regional governance

International cooperation

ABSTRACT

Energy is slowly accepted as a key dimension of sustainable development and a key factor for emerging frameworks of global and regional governance. This bodes well for the development of countries in Sub-Saharan Africa where energy poverty is a key component of extreme poverty.

© 2014 Elsevier Ltd. All rights reserved.

1. Introduction

Over the past several years, economic news from the African continent have been quite up-lifting, with many countries boasting growth rates that are reminiscent of some of the Asian tigers (albeit with much higher population growth rates). Nevertheless, there are still many development challenges in many parts of Africa south of the Sahara, in particular in rural areas.

Energy poverty is usually part and parcel of extreme poverty. “The people who lack energy access are mainly the same people who lack access to clean water and sanitation, experience high food insecurity and would experience the worst impacts of climate change,” United Nations (UN) Secretary General Ban Ki Moon underlines in a recent report [1].

Only quite recently has the international community started to recognize the crucial role of modern energy services to unlock the full development potential of persons and communities. This Short Communication sketches some of the main strands – both normative and operational – of giving energy greater prominence in international cooperation, particularly renewable energy,

the subject of this Special Issue. For the first time, energy is taken seriously as a dimension of global governance and strengthened at the regional level, especially in sub-Saharan Africa. This emergence of energy as a factor of sustainable development is starting to transform the landscape, including and in particular in Africa.

2. Energy’s slow move unto the sustainable development agenda

Even though it is hardly conceivable to discuss “sustainable development” without also examining the production, distribution and use of energy, some 20 years had to pass since the 1992 Rio Earth Summit before energy considerations started to be included in global governance frameworks. Neither Agenda 21, the seminal program of action passed at Rio, nor the UN Millennium Development Declaration, adopted in 2000, contained energy considerations.

Informal multi-stakeholder platforms operating patiently over lengthy periods of time [2] and major international scientific endeavors [3] contributed greatly to building a consensus about the role of energy in the pursuit of sustainable development. In the late 1990s and the first decade of the 21st century, recognition spread slowly that poverty eradication would remain elusive as long as extreme energy poverty was not tackled; that none of the Millennium Development Goals could be attained without appropriate

* Correspondence to: Global Forum on Sustainable Energy, Austria.
Tel.: +86 1065321920.

E-mail address: Irene.giner-reichl@bmeia.gv.at

¹ Currently Austria’s Ambassador to the PR of China and Mongolia.

energy interventions; and that curbing greenhouse gas emissions would require a major shift to more sustainable energy futures.

Expert groups such as Advisory Group on Energy and Climate Change (AGECC) [4] brought together major stakeholders and their reports helped jell the emerging consensus. The Vienna Energy Forum meetings of 2009 and 2011 (www.viennaenergyforum.org), drawing on the international network built in yearly meetings of the Global Forum on Sustainable Energy (www.gfse.at) since 2000, prepared the ground for the launching of the Initiative of the UN Secretary-General on “Sustainable Energy for All” (SE4ALL, www.se4all.org) in December 2011.

SE4ALL has three overarching objectives that are mutually supportive and should be reached by 2030:

- To provide access to electricity and to modern cooking fuels for the billions of people currently without it.
- To double the rate of energy efficiency improvements.
- To double the share of renewable energies in the overall energy end use.

3. A new form of international cooperation on sustainable energy for all

At the Rio+20 conference in June 2012, major partners of SE4ALL came together to publicly show their support for the initiative. On 21 June 2012, the UN Secretary General announced more than 100 commitments on sustainable energy, estimated at over \$50 billion and formulated by governments; private sector corporations, small and medium-scale enterprises; financial institutions, donors and development banks; and non-governmental organizations, artists, academia, and individuals [5].

Kandeh Yumkella, who had been working tirelessly to build the needed coalitions, was named as UN-Secretary General Special Representative for Sustainable Energy for All. Since June 2013, he acts as SE4ALL’s full-time chief executive officer.

By end of 2014,

- more than 100 countries (including 85 developing countries) have joined SE4ALL as partners.
- In 30 focus countries, some 14 of them in Africa south of the Sahara (Burkina Faso, Burundi, Ethiopia, Gambia, Ghana, Guinea, Kenya, Liberia, Mozambique, Rwanda, Senegal, Sierra Leone, Tanzania, Uganda), the SE4ALL Country Action Process has been promoted.
- SE4ALL partners are developing action agendas, investment prospectuses, energy policies, rural electrification plans, and strategies for scaling up clean cooking solutions.
- Of particular note is the €40 million SE4ALL technical assistance facility of the European Union (EU) for Africa; Norwegian Energy+; the World Bank’s Energy Sector Management Assistance Program (ESMAP) SE4ALL technical assistance facility; the proposed United Kingdom SE4ALL mini-grid facility and the recently launched EU rural electrification financing facility in support of SE4ALL.

The European Commission and individual European countries are committed, in support of SE4ALL, to reduce energy poverty by more than 500 million people within two decades. SE4ALL has a memorandum of understanding, since September 2014, with the US Power Africa initiative, United States (US) President Barak Obama’s initiative to increase energy in Africa. The EU and US commitments taken together, if implemented, would mean that extreme energy poverty might at least be halved by 2030.

At the UN Climate Summit on 23 September 2014, SE4ALL launched a new Global Energy Efficiency Accelerators platform to promote energy efficiency in buildings, lights, appliances, transport, industry and district heating that should result in cuts of more than 1 Giga ton of carbon emissions annually by 2025, not to speak of the billions of dollars saved.

Alliances between private banks, multilateral and national development banks, and institutional investors have the potential of mobilizing an additional \$120 billion in energy sector investments. Almost 2000 energy experts from almost every country on the globe join together in the Energy Access Practitioner Network and the World Bank ensures a robust Global Tracking Framework which was launched in 2013 (www.se4all.org/tracking-progress/). It establishes baseline energy data and provides regular bi-annual updates on trends in energy access, renewable energy and energy efficiency.

SE4ALL is still in search of its future legal nature. Any format chosen will have to allow for a good interaction between the public and the private sectors. As the World Energy Commission Trilemma Reports 2012 and 2013 (www.worldenergy.org) underline, public and private players need to listen better to each other and to interact more effectively. Governments need to set clear, long-term frameworks for markets; private sector players have to articulate their needs and expectations clearly to governments.

But an “Initiative” cannot sign checks, nor rent premises. The options are to align with the UN; to form another international organization; or to operate out of a non-for-profit non-governmental setting. For some stakeholders, strict intergovernmental settings and alignment to the UN may seem narrow. Yet the UN’s convening power and ability to promote global consensus are irreplaceable. Perhaps more clarity will be shed on the most desirable future shape for SE4ALL, as the post-2015 architecture in general – in particular the mechanism of review – is reflected upon. Clearly, SE4ALL would need to be one of the pillars of this post-2015 architecture, so the institutional setting finally chosen should be commensurate to the task.

“A robust mechanism to review implementation will be essential for the success of the goals. The General Assembly, the Economic and Social Council and the high-level political forum will play a key role in this regard”, the Outcome document of the Open Working Group of the General Assembly on Sustainable Development Goals (A/68/970, para. 14) states. Annual Global Sustainable Development Reports will help in this review of implementation. And entities within the UN system will have to take responsibility for elaborating the chapters relating to the different sustainable development goals. Many of the sustainable development goals have well-established homes within the UN system, but some do not. Energy, with the undefined final status of SE4ALL, is currently among the more “unhoused” ones.

4. UN-decade of sustainable energy for all

In 2012, the UN General Assembly decided that 2014 to 2024 should be the Decade of Sustainable Energy for All. On 16 December 2013, member States agreed on the first overall energy mandate for the Secretary General who is tasked to coordinate the UN’s work on the Decade on SE4ALL. All member States are urged to contribute to it.

In his report on the decade (A/69/395), the UN Secretary General lays out some broad pillars for a global plan of action for the Decade including strategic objectives, a suggested broad outline of activities and focus areas, milestones and tracking of progress and organizational arrangements. Foremost among the strategic objectives is to catalyze actions at all levels to transform the world’s

Table 1
Goal 7 of the UN general assembly sustainable development goals.

Energy objectives	
7.1	Ensure universal access to affordable, reliable and modern energy services
7.2	Increase substantially the share of renewable energy in the global energy mix
7.3	Double the global rate of improvement in energy efficiency
7a	Enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
7b	Expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries and small island developing States.

Source: Report of the Open Working Group of the General Assembly on Sustainable Development Goals, A/68/970, para. 18.

energy systems toward an equitable and sustainable future; to attract significantly increased investments toward the world's energy systems; to increase support for research and development; to create more incentives for a change in behavior to manage and allocate resources in a more sustainable manner; and to enhance dissemination of knowledge, commitments and solutions.

Currently the decade is masterminded primarily by the Special Representative of the UN Secretary General for Sustainable Energy for All, Kandeh Yumkella; he leads the coordination of activities under the Decade on behalf of the Secretary General, drawing also on his roles as Chair of UN-Energy and Chief Executive Officer of SE4ALL, supported by a Global Facilitation Team. The first annual Sustainable Energy for All Forum took place from 4 to 6 June 2014 in New York, the second one is slated for 18–22 May 2015.

5. Post 2015: a sustainable development paradigm with energy goals

As the 2015 deadline of the Millennium Development Goals approaches, the international community readies itself to define a post-2015 development paradigm. This time, as stated by the outcome document “The future we want”, of the Rio+20 Summit in 2012, endorsed by the General Assembly in its resolution 66/288, one international development paradigm should guide the progress of so-called developing and developed countries alike. A paradigm under which governments and civil society, businesses and academia will have to find new ways of adjusting production and consumption. A paradigm which will operate within countries and across national boundaries. A paradigm that answers to some of the most fundamental questions of our times: How do we move toward sustainable development? How do we ensure the provision of water, food, and natural resources for a world population expected to peak around 9 billion people by mid-century? How do we balance economic growth with social justice and with a management of natural resources that respects the earth's carrying capacity and takes into consideration future generations' needs? And how does energy fit into the equation?

In September 2015 when the international community agrees on the objectives of the development paradigm for the post-2015 period, energy considerations will hopefully be fully integrated into the deliberations. The High-Level Report, “A New Global Partnership” [6] of 30 May 2013 includes, among the 12 indicative goals proposed, goals on energy: the three SE4All goals plus a fourth goal, “to phase out inefficient fossil fuel subsidies that encourage wasteful consumption”. The Sustainable Development Solutions Network's report, “An Action Agenda for Sustainable Development”, www.unsdsn.org, proposes 10 goals and includes “ensuring sustainable energy” in its 8th goal. A global consultation process about targets and indicators was carried out in 2014.

On 1 August 2014, the Chairs of the Open Working Group of the General Assembly on Sustainable Development Goals, the Permanent Representatives to the UN of Hungary and Kenya, transmitted the Report of their Working Group to the President of the General

Assembly (A/68/970). On 19 July 2014, at the second meeting of its thirteenth session, the Working Group had agreed by acclamation to a proposal on 17 sustainable development goals and targets (which will be complemented by indicators focused on measurable outcomes in a process that is still ongoing). As spelled out by para. 18 of A/68/970, the sustainable development goals “constitute an integrated, indivisible set of global priorities for sustainable development. Targets are defined as aspirational global targets, with each Government setting its own national target guided by the global level of ambition, but taking into account national circumstances.” As Table 1 shows, Goal 7 speaks to the energy objectives, each of which has a target year of 2030.

6. Evolving regional cooperation

As elements for future global governance are defined and SE4ALL is unfolding as an operational network of networks, regional institutions are also evolving. In Africa, the ECOWAS Center for Renewable Energy and Energy Efficiency, www.ecreee.org, in operation since 2010, has already catalyzed the adoption of regional policies, on renewables, energy efficiency, hydro-power and biofuels. (For more on ECREEE's founding, see Hancock 2015a in this Special Issue.)

The accelerated deployment of renewable energy and energy efficiency practices in the region require good, even better, up-to-date information. The ECOWAS Renewable Energy and Energy Efficiency Status Report, co-produced by ECREEE and REN21 (www.ren21.net) and launched in November 2014, provides a comprehensive overview of the status of renewable energy markets, industry, policy and regulatory frameworks and investment activities in the ECOWAS region.

The ECREEE model is perceived to be quite successful, so much so that several other regions in Africa are set to emulate it. Of these, the Eastern African Community (EAC) is most advanced in its endeavors to establish EACREEE (Eastern African Center for Renewable Energy and Energy Efficiency) which has been formally approved at the level of ministers of energy and heads of government. Following a selection process for the host country, the commission evaluating the various bids has recommended to establish the center in Uganda (Kenya and Rwanda had also submitted bids). However, the formal EAC decision regarding the location is still pending. EACREEE has already initiated first activities and it is expected that the EAC Summit in mid-March will endow EACREEE with its first regular budget.

The SACREEE (Southern African Center for Renewable Energy and Energy Efficiency) is ready to launch, but has not yet been formally approved by the ministers of energy of the region, who have not had a plenary meeting for more than a year. South Africa, Namibia, Mozambique, inter alia, are bidding to house the SACREEE headquarters. A SADC Renewable Energy Status Report is projected to be completed by REN21 in cooperation with South Africa in time for the *South African International Renewable Energy Conference* (SAIREC) discussed below.

Several other centers are being created outside Africa. These include CCREEE for the Caribbean, PCREEE for the Pacific small islands, HCREEE for the Himalaya region, and MCREEE, Mesoamerican Center for Renewable Energy and Energy Efficiency, and the Regional Center for Renewable Energy & Energy Efficiency (RCREEE) for the Arab states.

7. South African international renewable energy conference (SAIREC, 4–7 October 2015, Cape Town)

SAIREC is the first of the International Renewable Energy Conferences [7], that will take place on African soil. It is bound to further boost awareness about the challenges African countries continue to face regarding energy security as well as about the opportunities offered by an energy transition to low-carbon fuels, both for African decision-makers and for the international investment and cooperation communities. It will hopefully also move African ministers to adopt a more coordinated approach to attracting investment and implementing infrastructure programs.

According to the organizers – the Energy Department of the Republic of South Africa, SANEDI (South African National Energy Development Institute) and REN21 – SAIREC will

- highlight the opportunity Africa has to “leapfrog” typical carbon intensive development trajectories;
- show the true potential renewable energy has in contributing to the objectives of SE4ALL in Africa;
- raise awareness of the clean energy mega-projects taking place on the continent;
- market the African continent to potential investors; and
- ascertain the best policy approaches for African countries about to embark on national programs built on clean energy.

Topics to be discussed currently include

- clean energy corridors and needed regulatory frameworks;
- how to maximize the benefits of renewable energies to countries rolling it out;

- resource mapping that establishes Africa as the number 1 destination for investment in renewable energy infrastructure;
- how to develop a grid system to allow renewables to be brought ongrid seamlessly, including through smart grid applications;
- integrating renewable energy and energy efficiency toward a low carbon future in Africa;
- bringing the full potential of SE4ALL to fruition for the African continent for poverty alleviation/economic development and climate change mitigation/adaptation;
- sharing experiences on what makes a project attractive to financiers; and
- identifying ways to stir up technology and innovation in Africa.

8. Conclusion

Out of the globally 1.2 billion people who still live without access to electricity, some 600 million are living in Sub-Saharan Africa [8].

The recognition of energy as a key factor for sustainable development and energy’s inclusion in an increasing number of global and regional frameworks of cooperation and governance bodes well for the world’s poorest of the poor. Especially on the African continent, where energy systems have yet to be built up in many significant ways, the potential for leapfrogging to low-carbon development paths on a large scale is – perhaps for the first time – real and palpable.

References

- [1] Report of the UN SG A/69/395 on the UN decade on sustainable energy for all.
- [2] Such as the Global Forum on Sustainable Energy, www.gfse.at; the International Renewable Energy Conferences (IRECs), the REN21 network (www.ren21.net).
- [3] The Global Energy Assessment 2012; www.globalenergyassessment.org
- [4] AGECC published the Report “Energy for a Sustainable Future” in 2011.
- [5] <http://www.un.org/apps/news/story.asp?NewsID=42297>
- [6] <http://www.post2015hlp.org/the-report/>
- [7] International Renewable Energy Conferences have so far been held in Bonn 2004, Beijing 2005, Washington 2008, New Delhi 2010, Abu Dhabi 2013.
- [8] World Energy Outlook 2013.