

# Perspectives on Energy Security and Renewable Energies in Sub-Saharan Africa

Practical Opportunities and Regulatory Challenges



Edited by  
Oliver C. Ruppel & Bernd Althusmann



**Perspectives on Energy Security and Renewable Energies in Sub-Saharan Africa**  
Practical Opportunities and Regulatory Challenges

Ruppel & Althusmann (Eds)



Energy security is one of the most important future challenges on the international agenda of security, peace and stability worldwide. The escalating demand for energy and the imperative of energy independence are playing a mounting role in politics – and eyes are turning to Africa as the continent with the highest potential for renewable (and other) energy resources for the future.

Energy security is the *sine qua non* in stabilising democracy and economic growth, and in reducing poverty and the impacts of climate change. This timely publication investigates energy security and renewable energies in sub-Saharan Africa, pointing out practical opportunities and regulatory challenges from the perspective of various African and international experts.



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## FOREWORD BY THE EDITORS

Energy security is one of the most important future challenges for the international agenda of security, peace, and stability worldwide. Increasing energy supply needs and the aim of achieving greater energy independence are playing a mounting role in politics, not only in the United States, Europe, Russia, China and India, but also in Africa as the continent with the highest potential for energy resources for the future.

The quest for control and commercialisation of energy resources is also a reality in sub-Saharan Africa. Nigeria and Angola are the biggest oil-exporting countries after the countries of the Middle East. Namibia is one of the biggest uranium-exploiting countries, while Tanzania may in future become one of the most important gas-exporting African countries to world markets. The United Nations forecasts that the African population will be around 2 billion people in 2050, and therefore the expanding demand for energy will be one of the challenges with which Africa is faced, along with poverty reduction, food security, water security and combating the impacts of climate change. But Africa's challenges are also world challenges, because energy security is a global priority, with global markets, interests and needs.

More than ever, a reliable discussion about the importance of coordinating secure energy supplies worldwide, and especially the impact on Africa, is essential for the future of this continent, as part of the international energy security structure. The African Union represents a continent which is faced with different aims, security interests and needs, if one compares the destabilising developments over the past 10 years in the north, south, east and west of Africa. Which path will Africa take in respect of rapidly growing energy demands on the continent – the European or the Asian path?

The energy demand worldwide “is expected to increase by 27% by 2030, with important changes to energy supply and trade flows”.<sup>1</sup>

In times of global unrest and crises the aspect of energy supply security becomes more critical. Power politics and territorial interests as well as new extraction technologies may cause controversies between political, economic and civil society actors. With regard to the adjacent security and regulatory challenges, a reliable and climate-friendly energy supply is required. In that respect, intergenerational equity and the integrity of creation should serve as key motives.<sup>2</sup>

Pressures linked, for example, to agriculture, food security, water scarcity and energy

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1 See Communication from the Commission to the European Parliament and The Council, 2014, European Energy Security Strategy, COM/2014/0330 final, available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0330&from=EN>, last accessed 10 February 2015, 1.

2 Konrad-Adenauer-Stiftung, 2015, International Report on Resources, Energy and Law, 1/15, available at [http://www.kas.de/wf/doc/kas\\_40185-544-2-30.pdf?150126095215](http://www.kas.de/wf/doc/kas_40185-544-2-30.pdf?150126095215), last accessed 30 January 2015.

demand are also increasing in Africa, not only putting ecosystems at risk.<sup>3</sup> Energy security is the indispensable presupposition for stabilising democracy and economic growth, and for reducing poverty and the impacts of climate change. In Europe the debate about “energy security independence or interdependence?” has been ongoing.<sup>4</sup> In sub-Saharan Africa the short- and long-term obligation to decide the way forward currently forms part of the priority agenda on energy security in 2015. Prosperity and stability can only grow in southern African countries if there is a stable and abundant supply of energy. The dependency on foreign energy imports, in combination with insufficient electricity supplies, will inevitably and primarily affect the poor and the employment sector. The more energy prices increase, the higher the unemployment rate, which is already alarming in many countries of sub-Saharan Africa.

How many of the people living presently in sub-Saharan Africa do really have secure and constant access to electricity; and what is really needed in this regard in the near future? Needless to say, developing countries are the most vulnerable to energy and power failures, despite their wealth in energy resources. They are probably depending on large energy imports from other countries and have to face a projected increase of energy prices on a national level. Energy security issues will, however, in all likelihood only be solved in cooperation between several countries, for instance the Southern African Development Community (SADC) member states.

An applicable saying from Kiswahili points out that “together we can make a difference”. In around 100 countries worldwide the Konrad-Adenauer-Stiftung (KAS) contributes to the promotion of democracy, rule of law, and social market economy. As a political foundation and a well-known think tank, KAS cooperates with different organisations in political fields like good governance, human rights, gender equality, adult education, climate change, and energy. The Development and Rule of Law Programme (DROP) at Stellenbosch University in South Africa researches and promotes sustainable development law and policy, focusing on reconciling the tensions between environmental sustainability, economic development, and human welfare, with a holistic view of current legal, political, economic, social, and cultural developments. With its “law-for-development, investment-for-the-poor, and policy-for-society approach”, DROP facilitates knowledge transfer by deepening existing and establishing new partnerships with policy makers, governments, diplomatic corps, commerce, industry and academic institutions – particularly on the African continent. Together KAS and DROP provide

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3 Niang, I. & O.C. Ruppel, 2014, Africa, in: Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, & L.L. White (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability – Part B: Regional Aspects*, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge, Cambridge University Press, 1199.

4 Munich Security Conference, 2015, Energy Security: Running out of St(r)eam?, in: Munich Security Report 2015, available at <http://www.eventanizer.com/MSR2015/MunichSecurityReport2015.pdf>, last accessed 10 February 2015, 42.

expertise and a platform for public discussions. They have joined forces in supporting sub-Saharan Africa towards a stable energy supply and energy security for the future.

On 11 September 2014, we invited highly respected experts to a conference on energy security in Windhoek, Namibia. The contents and results of this conference are reflected in this publication and underline the importance of energy security for the ongoing development of sub-Saharan Africa. As the editors of this publication, we are grateful to the contributors for their commitment and expertise, which are so remarkably reflected in this book.

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