

Editorial

Having worked as an econometrician for many years, I have at least a vague idea about the complexity of empirical simulation models supposed to prove the link between climate change and energy-related carbon dioxide (CO₂) emissions. From what I understand, sustainable energy finance is one of the straighter and smarter options among all the approaches aiming at CO₂ emissions reduction. It is easy to implement across the globe as it builds upon a functioning institutional infrastructure – the banks.

This newsletter refers to GFA's long-standing experience in sustainable energy finance which dates back to the late 1990ies, when GFA implemented a KfW-financed industrial efficiency and pollution control credit line in Indonesia. This was the starting point for the successful implementation of a large number of sustainable energy projects worldwide. Our project examples show some on-going activities of GFA as related to sustainable energy finance in Kyrgyzstan, India, Croatia and Georgia. These projects are impressive because of the broad scale of different innovative interventions that result in win-win situations: less energy shortages or the implementation of energy saving building technologies mean improved living standards, and less CO₂ emissions mean climate protection.

This raises hope for straight-forward, effective and ready-to-use interventions that can help adapt to climate change. We at GFA are ready to share our experience for the benefit of a "greener" future.



Klaus Altemeier
Managing Director
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Combating climate change with sustainable energy finance

In December 2015, a global climate agreement was adopted at the United Nations Framework Convention on Climate Change (UNFCCC) 21st Conference of the Parties in Paris. The related Paris Agreement serves as a basis for all countries to limit global temperature rise to 2 or even 1.5 degrees Celsius and adapt to climate change impacts. The Agreement is a landmark and will spur action to address climate change. But the need for financing developing and emerging countries to meet the challenges posed by climate change is immense.

The Agreement calls for industrialized countries to provide financing to address the reduction of greenhouse gas (GHG) emissions and the adaptation to climate change. While the global climate financing architecture is still a rather abstract concept, GFA has been implementing related projects worldwide on behalf of bilateral and multilateral development partners since late 1998. In these projects, GFA assists financial institutions (FI) in developing and emerging countries in providing financial products and services to businesses, households and municipalities with environmental and climate concerns in mind. Thus,

the lending decision, risk management and monitoring processes are designed to promote economically sound and environmentally responsible investments to reduce or avoid GHG emissions. The related investment scope varies from the promotion of renewable energy (RE) sources for electricity generation to energy-efficient industrial processes and residential buildings as well as resource-efficient water and waste management. To reach scale, GFA supports up to client FIs in each project.

GFA advisory services range from developing green lending products that meet the local market demand to assisting clients of participating financial institutions (PFIs) in improving business models and increasing their bankability. Awareness raising among local businesses, communities and households regarding the benefits of sustainable energy solutions is an additional service. GFA strongly believes that climate action is not only the responsibility of governments but that the private sector, local communities and civil society should be enabled to tackle climate challenges in cooperation with



Energy efficient industrial processes: Green IceTea production in Kyrgyzstan

public institutions. To this effect, GFA has developed a set of proven tools. An operations manual includes processes, procedures and standard templates as well as tools. An online energy savings calculator serves demonstration and decision making purposes. Technology-specific financial models for different renewable technologies simulate the financial performance of RE investments. Project appraisal guidelines for different renewable technologies

assess risk patterns prior to sanctioning. User-friendly toolkits for environmental and social impact analysis (ESIA) comply with international standards and categorize projects regarding their risks. Training on technical and financial aspects as well as training-of-trainers modules complement GFA's range of tools.

GFA already started and continues to play its part in putting the collective will

of the international community, private businesses, local communities and civil society into practice and limit global warming to safe levels. The project examples below provide an overview on how GFA effectively uses its wide range of advisory services, innovative interventions and tools.

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From the field

Energy and water resource efficiency investments in Kyrgyzstan

Kyrgyzstan suffers from energy shortages due to obsolete power generators as well as transmission and energy losses that deteriorate the country's energy situation, economic competitiveness and living standards. Recognizing these challenges and vast improvement potentials, the European Bank for Reconstruction and Development (EBRD) established the Kyrgyzstan Sustainable Energy Financing Facility (KyrSEFF) in 2013. The 20 million US Dollar credit line for on-lending through PFIs has been financing Energy Efficiency (EE) investments in the industrial and residential sectors.

Due to highly subsidized energy prices, expectations for the credit line to take up among Kyrgyz businesses and the population were low. But GFA advisory services let the Facility quickly outperform target indicators. Building on these achievements, the EBRD expanded KyrSEFF with a 35 million US Dollar credit line in 2015. The enhanced Facility goes beyond EE by including water resource efficiency investments. Supported projects focus on resilience and adaptation to climate change. KyrSEFF II supports households selecting and installing appropriate water saving measures and increasing the efficiency of irrigation in the agricultural sector. It further assists the tourism and hospitality sector to save water and treat waste water while lending continuous support to households and companies in maximizing their EE potential.

Complementing ongoing consultancy for EE investments, GFA provides PFIs with technical assistance on loan prod-



Insulation of residential buildings improve living standards

uct development as well as trainings on financing and marketing related to resource efficiency, climate adaptation and RE projects. For KyrSEFF, GFA has developed and implemented highly successful and innovative marketing measures. These range from TV and radio clips to contributions in printed media and social networks. To date, KyrSEFF has become a brand that stands for innovative support and regional leadership in EE. GFA intends to apply this image to more holistic climate change mitigation and adaptation.

www.kyrseff.kg/en

Clean energy for rural development in India

While India has experienced significant economic transformation that has translated into changes in living standards, the country's electricity generation is still inadequately developed. Insufficient energy supply is particularly common in rural areas. This contributes to socioeconomic disparities between rural and

urban areas and is an obstacle to educational and income-generating opportunities, domestic security and the quality of medical care. To address the frequent electricity shortages in a sustainable manner, KfW Development Bank has provided India's Rural Electrification Corporation (REC) with a 100 million Euro credit line to refinance loans for RE investments in rural areas. Additional funds were allocated to provide advisory services to the REC's RE Division and local project developers for financing and implementing RE investments.

GFA provided six multi-day trainings on technical and commercial aspects of appraising and financing RE investments for REC personnel. The trainings were complemented by workshops for local project developers to establish a mutual understanding of the RE project appraisal process. Two REC delegations have been invited to Berlin for state-of-the-art training on RE financing and site visits to RE projects across Germany.

In order to improve REC's financing process for RE projects and manage associated financial and project risks, GFA is further assisting REC in developing a set of RE financing tools. This includes the development of financial models to simulate the financial performance of RE projects and assist financing decision and monitoring processes. Project appraisal guidelines for different renewable technologies assess risk patterns prior to sanctioning. The mentioned ESIA toolkit categorizes RE projects regarding their risks and an assessment of the RE Division brought forth recommendations for its sustainable growth. An operational manual will assist REC personnel in the entire RE finance process.

Sustainable energy finance to improve living standards in Croatia

In January 2016, the EBRD launched REENOVA+, a 60 million Euro credit line for financing EE improvements in Croatian households. Sub-loans under the new REENOVA+ financing facility will be extended by PFIs. The new facility will finance the installation of energy efficient windows, the insulation of walls, roofs and floors and the introduction of efficient boilers, solar water systems, heat pumps or home appliances. In sum, this will enable households to substantially reduce their energy bill and increase comfort levels as well as living standards.

Achieving these benefits will be facilitated by the REENOVA+ Technology Selector. This online selection tool contains a wide range of pre-approved technologies, which will save at least 20% of energy against the Croatian market average. The tool allows interested households to compare and choose their preferred EE solution and provides recommendations on possible combinations. The Technology Selector also provides an opportunity for equipment vendors to promote their products. Additional vendors and manufacturers are invited to join. In expanding the supply base for energy-efficient technologies in Croatia, manufacturers, retailers and installers of these technologies can take a REENOVA+ loan through PFIs to enhance their service to Croatian households.

As promotion is the key to the successful utilization of the Facility, this creates special demands regarding the support to PFIs and



REENOVA+ launch event

marketing in general. For REENOVA+, GFA created a training video using a graphical recording animation technique. The video uses a mascot that has become a trademark of REENOVA+ and features in all marketing and promotion material. www.reenovaplus.org

Promotion of small hydropower in Georgia

Increased energy demand because of economic and population growth across developing and emerging countries is mostly met by the utilization of fossil energy sources. This contributes further to the negative impact the energy sector has on GHG emissions.

In 2013, KfW Development Bank assigned a consortium with GFA as a partner to capitalize on the natural hydropower potential in Georgia and aid the country on its path to a greener economy. GFA experts have been supporting the Bank of Georgia to evaluate financing applica-

tions for small hydropower plants (SHP) and related potential environmental and social risks. In addition, GFA assists the bank in monitoring loans and managing risks of the funded projects.

Moreover, the GFA team of experts is advising project developers, owners and operators of SHP in realizing construction, rehabilitation or expansion projects. GFA consultants provide technical assistance and advise on design and implementation concepts for SHP. They develop and improve the financial framework and business models, and assure compliance with environmental and social standards as well as safety regulations. Finally, GFA assists SHP owners in operating and monitoring their industrial units.

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Change in management of GFA Certification

As of May 2016, Jörn Ackermann has assumed the position of Managing Director with GFA Certification. He holds an MSc degree in wood science and technology and has worked as a consultant in the wood and forest sector. Since 2009, he has been working for GFA Certification as a freelance auditor. He replaces Carsten Huljus who, after 14 years with GFA as Managing Director and shareholder, resigned in April 2016. Carsten Huljus was appointed CEO of the Sustainable Biomass Partnership (SBP) as a certification system and standard setter for sustainably sourced woody biomass. GFA Certification (www.gfa-cert.com) with headquarters in Hamburg is one of the leading certification bodies regarding FSC®- and PEFC™ certification services. Since its founding in 1999, GFA has certified more than 950 companies from the wood, paper and forestry sector in 37 countries according to FSC- and PEFC™ standards (FSC® A000511 and PEFC/04-04-0099).

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Ecosystems and economic activities around national parks in Ivory Coast

The GIZ project Development of the Tai and Comoé Nature Conservation and Economic Areas focuses on the development of areas around the Tai and Comoé national parks. By 2019, GFA aims to improve the production, processing and marketing capacities in the cocoa, palm oil, vegetables, cassava and cashew value chains. Public and private services and farmer associations are assisted in improving agricultural extension services. GFA experts work closely with

the national park management authority to strengthen the latter's capacities, especially in regard with implementing and monitoring protection activities. A stronger involvement of communities in co-management structures is to strengthen management and local capacities. This requires joint activities and trainings. In 2013-2016, GFA had already supported 150,000 micro, small and medium enterprises in several value chains in northern Ivory Coast.

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Association agreement between Ukraine and European Union

On 19 May 2016, Deputy Prime Minister of Ukraine, Ivanna Klymush-Tsyntsadze, EU Ambassador to Ukraine, Jan Tombinski and Head of the EU Support Group to Ukraine, Peter Wagner launched the EU funded Support to the Implementation of the Association Agreement between Ukraine and European Union project in Kiev. The project is implemented by a consortium led by GFA Consulting Group and will be completed in January 2019. The opening was followed by presentations of high-level international experts from the United Kingdom and Poland, the Director of Government Office of European Integration and the GFA project team. Representatives of different Ukrainian government bodies, civil society, think tanks, academic institutions, and businesses engaged in a lively discussion on the presentations. One of the widely discussed topic was the relevance of the much-appreciated fellowship program which provides for 290 fellowships throughout the project's duration. The project aims at reinforcing capacity of Ukrainian governmental in-

stitutions regarding their commitments under the Association Agreement. The project offers technical assistance in four areas: approximation of Ukrainian legislation with the EU aquis, human resources development, policy development and coordination and public communication.

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Russian Sustainable Energy Financing Facility completed

One of the sustainable energy financing facilities GFA has been assisting on behalf of the European Bank for Reconstruction and Development (EBRD) was successfully completed in Russia in February 2016. By international standards, Russia has one of the most energy-intensive economies. To overcome excessive energy consumption and GHG emissions, the EBRD established the Russian Sustainable Energy Financing Facility (RuSEFF), a credit line to finance energy efficiency (EE) and renewable energy (RE) investments of local businesses through participating financial institutions (PFIs). Since April 2009, close to 1,300 projects amounting to 284 million US dollars were disbursed by ten PFIs. RuSEFF helped to improve the EE of Russian companies and introduced the concept of sustainable energy finance in Russia. RuSEFF had a positive impact on the Russian economy in general and on the finance sector in particular. The PFIs' co-funding on top of the credit line made available by the EBRD is a point in case. PFIs granted loans from their own financial sources amounting to almost 60% of the volume provided by the EBRD.

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GFA newsletter produced by GFA Consulting Group GmbH, Eulenkrußstraße 82, 22359 Hamburg, Germany, phone: +49(40)60306-0, fax: +49(40)60306-199, e-mail: info@gfa-group.de | www.gfa-group.de | www.facebook.com/gfagroup | All rights reserved © 2016
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GFA vision – to be the partner of choice for clients in our core service areas.

GFA mission – to improve the livelihood of beneficiaries through our professional services.

GFA core values – to offer high performance in service delivery, technical excellence in our main sectors, innovative approaches and products, and credibility with our clients when putting projects into practice.