

**GET FiT
ZAMBIA**

Annual Update

2020

Multiconsult



KFW

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Message from the Ministry of Energy

The liberalisation of Zambia's electricity sector, in 1994, was done with the aim of stimulating private sector participation and to promote competition in the industry. Various strategies to scale up the development of renewable energy, such as the REFiT Strategy, were developed to compliment Government's efforts. In this regard the Government of Zambia, with support from the German Government through KfW, has been implementing the GET FiT Zambia programme. The programme is designed to assist with the implementation of its REFiT Strategy which aims to procure and support Independent Power Producer (IPP) projects up to 20 MW. As a means of further enhancing private sector participation the government, in February 2020, gazetted the new Electricity Act No. 11 of 2019 and the Energy Regulation Act No. 12 of 2019 making provisions for an open access market regime.

Despite the progress, investments in the electricity sector have still not grown to envisaged levels. Electrification rates remain low and the onset of the power crisis in 2015 and 2019 revealed the sectors vulnerability to adverse effects of climate change, reiterating the crucial need for investment in a diversified power generation portfolio.

While the GET FiT Zambia Solar PV tender achieved some of the lowest tariffs in the region and presented a good opportunity to diversify the country's energy mix, the implementation has stalled due to structural challenges in the sector. Further developments towards diversification were expected through the launch of the GET FiT small hydropower tender. However, this too was delayed due to sector challenges as well as the impacts of the COVID-19 pandemic.



Notwithstanding the setbacks that were experienced in 2020, the Government of Zambia remains committed to addressing the challenges to unlock delays in the GET FiT Zambia projects and to ensure that the Zambian people benefit from these low electricity tariffs. It is our expectation that by addressing these inherent barriers in the sector, it will help to stimulate future private sector participation that will contribute to increased electricity generation and increased access to electricity.

Matthew Nkhuwa, MP
Minister of Energy

Status of GET FiT in 2020

The year 2020 started with a good outlook for the implementation of the Global Energy Transfer Feed-in Tariff (GET FiT) Zambia programme. The Solar PV Successful Bidders had been working towards meeting key project progress milestones with a great sense of earnestness and determination. This was despite underlying concerns over whether the initiatives being undertaken by the Zambian Government to address the electricity sector sustainability would yield necessary results to address the project lenders and the broader investor concerns.

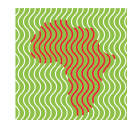
The prospects had looked promising with the coming into effect of electricity tariff increases, approved by the Energy Regulation Board (ERB) at the end of 2019. The end of 2019 had also seen the re-appointment of a Cost of Services Study (CoSS) consultant. By early February 2020, the inception report had been released and the first stakeholder workshop had been arranged by ERB. During the same period, the Government of Zambia promulgated the new National Energy Policy of 2019 which has led to the enactment of the new Electricity Act No. 11 of 2019 and Energy Regulation Act No. 12 of 2019, paving the way for an open access market regime. The new Energy Regulation Act No. 12 of 2019 also empowers ERB to set cost reflective tariffs for all customer segments in the sector. Through the new Act, the regulator will also have the ability to provide some tariff certainty through the introduction of a multi-year tariff system (MYTS) framework.

These actions by the Government of Zambia contributed to a relatively optimistic outlook at the beginning of 2020. In light of this the Secretariat pursued a plan to issue the Requests for Proposal (RfP) for Small Hydropower (SHP) projects toward the end of first quarter of 2020. However, things unfortunately took an unexpected turn as several challenges emerged during the year. Notable among the major challenges, was the outbreak of the Corona Virus Disease 2019

(COVID-19) pandemic whose immediate impact was felt with the introduction of global travel restrictions, which led to the postponement of the SHP RfP launch.

In addition, project lenders have maintained concerns about the financial sustainability of the energy sector which have continued to pose challenges for the solar PV projects selected under GET FiT Zambia to ach-

GET FiT Zambia is the Government of the Republic of Zambia's Programme to facilitate private sector investment in small- and medium-scale Renewable Energy Independent Power Projects (IPPs) in Zambia.



**GET FiT
ZAMBIA**

The Programme is a partnership between the Department of Energy and the German Development Bank, KfW, and is implemented by the GET FiT Secretariat. GET FiT Zambia was officially launched on 7th February 2018.

ieve financial close. Given this, lenders highlighted that they would temporarily be putting their funding activities in Zambia on hold and repurposing their resources for the year 2020 towards the fight against the COVID-19 pandemic. Further, lenders have indicated that recommitment towards funding the projects would be reconsidered toward the end of 2021, once the CoSS is complete and there are clear signals that the power sector is on a sustainable path. As a consequence, the SHP RfP cannot be launched until there are better prospects for bringing the awarded Solar PV projects to financial close. Though the GET FiT tenders are designed at the outset to limit the upfront costs that developers must spend before a successful award is granted, additional measures are now being introduced to further limit the required spending without compromising the tender process.

In the meantime, as the Zambian Government stakeholders, KfW and the German Government remain committed to the programme, the GET FiT Secretariat continues to be fully operational, maintaining contact with project lenders to evaluate the situation and explore options to enable bankability of all projects under the GET FiT Zambia programme. ■

The objectives of GET FiT Zambia are:

- Procurement of up to 205 MW of renewable energy capacity, as GET FiT Zambia has become the official implementation programme for the Zambian Renewable Energy Feed-in-Tariff (REFiT) strategy
- Contribution to diversify Zambia's power mix (both with regards to project size and geographically) while ensuring cost-effective and environmentally and socially sustainable projects to maximize value for Zambian end users
- Introduction of standardised legal documentation for Independent Power Producers (IPPs) in Zambia and improving regulatory & licensing procedures
- Successful integration of the procured renewable energy into the national grid
- Promotion of competition and private sector participation in the Zambian power sector

Implementing Agency: Ministry of Energy (Department of Energy)

Main Financing Institution: KfW (Germany)

Timeline: Programme Period is from 2018-2024



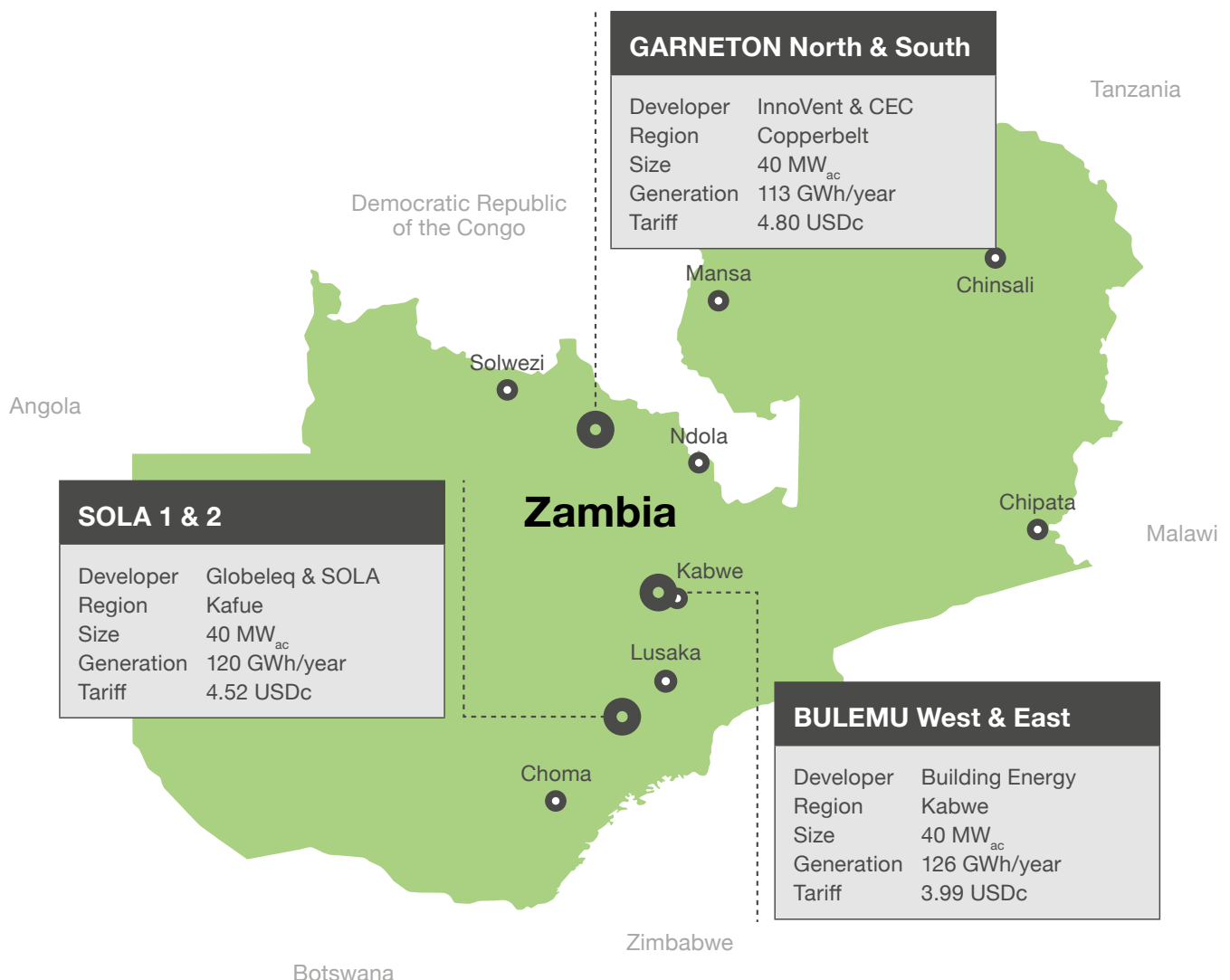
Solar PV

At the outset of 2020, the ambition related to the Solar PV programme was to ensure solid progress for the six projects, awarded in 2019 after a successful tender process which secured a total of 120 MW of Solar PV capacity (see details of the projects in the figure below).

The GET FiT Zambia Solar PV tender timeline and key project preparation milestones had initially been designed to facilitate a speedy implementation of the Solar PV projects given the significant power cuts experienced in 2015 and their impact on the economy at the time. With targeted completion of the projects in mind, the Successful Bidders of the projects in the

120 MW Solar PV Project portfolio progressed quite well with achieving some of the key project milestones. This included submission of the final feasibility study reports, obtaining grid connection design approval from the national utility company ZESCO Limited (ZESCO), and submission of the Environmental Project Briefs (EPBs) to the Zambia Environmental Management Agency (ZEMA).

The decision by project lenders to temporarily put their funding activities in Zambia on hold, as a result of sector sustainability challenges, has, however, impacted progress and resulted in the inability of the Solar PV



projects to achieve financial close in 2020, as initially envisaged. Despite the challenges with securing funding, Solar PV Successful Bidders have agreed to remain on board, extending their bid bond and bid price validity until such time that the outlook for progress is expected to improve. This will be conditional upon the lender requirements related to completion of the CoSS; improved financial standing of ZESCO and implementation of sector reforms.

Once successfully implemented, the Solar PV projects will be able to feed power into the grid at an average tariff of 4.41 US¢/kWh which is much lower than the reported average tariff in Zambia. Further benefits include the addition of 120 MW of climate friendly power to the grid and, with negative impacts of the power cuts on the economy, this is expected to provide a welcome relief to business.

Given the value that the Solar PV projects would represent if realised, the Secretariat together with key

Zambian stakeholders including Ministry of Energy (MoE) and ZESCO continue to make efforts to progress towards achieving financial close. KfW and the German Government have also expressed their support in ensuring that Solar PV projects can be implemented to allow Zambians to benefit from increased access to electricity at affordable tariffs.

The introduction of the open access regime under the new Electricity Act No. 11 of 2019 also creates opportunities for other alternative bankable offtaker structures to be considered. For the Solar PV project pipeline however, it was agreed that ZESCO would remain the off-taker. This would ensure that low tariffs, as awarded under the ongoing GET FiT Solar PV tender process, are maintained and that ZESCO, and ultimately the Zambian electricity consumers, are able to benefit from these tariffs. ■

Small Hydropower

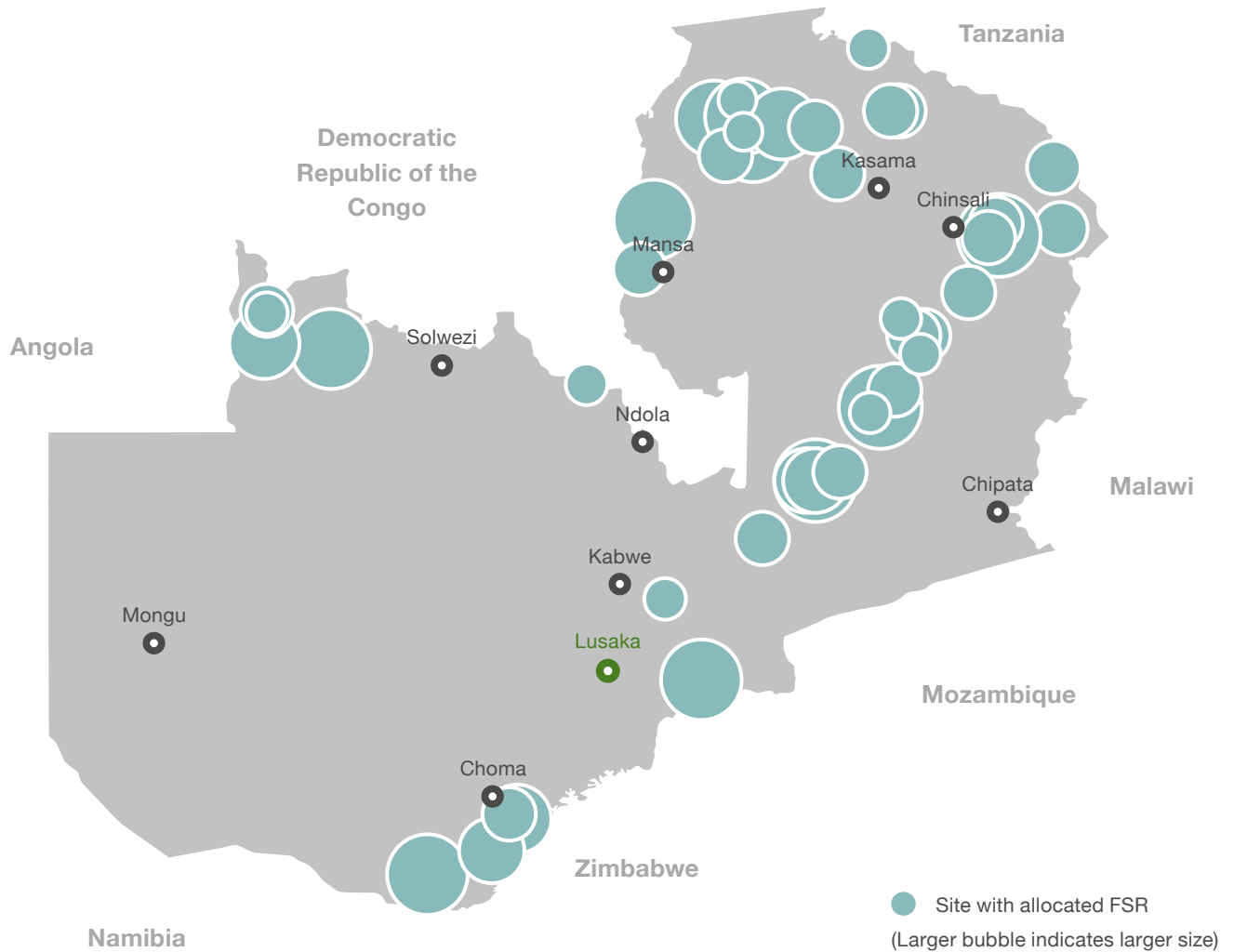
At the beginning of 2020, the GET FiT Secretariat worked together with the stakeholders to launch the RfP for the SHP tender by end of Q1_2020.

In the light of the prospect of RfP launch, the MoE launched a second round of feasibility study rights (FSR) applications in late 2019, open to GET FiT Zambia prequalified entities. Applications were reviewed and approved in the first quarter of 2020, followed by interim rapid grid assessments undertaken by the Programme Implementation Consultant and shared with the FSR holders. The MoE continued to monitor and evaluate regular progress reports submitted by the FSR holders throughout 2020 while considering the requirements for maintaining the FSRs in an effort to limit the costs incurred by developers retaining their commitment to participating in the programme.

In March 2020, the programme activities were put on hold. The trigger for postponement was the outbreak of the COVID-19 pandemic, but the postponement was prolonged in the light of the prevailing sector sustainability issues. The Secretariat continues to closely monitor the prospects of tender launch, which depend on the bankability of projects in Zambia, and progress in the implementation of the Solar PV project portfolio.

As of January 2021, GET FiT Zambia pre-qualified developers hold a total of 44 FSRs granted by the MoE to undertake feasibility studies for the small hydropower projects which will be procured under the GET FiT Zambia Programme. The sites, with capacities varying from 1 to 20 MW, are shown in the map on the next side. ■

Map of Zambia showing locations of potential hydropower plants with current Feasibility Study Rights:



GET FiT Zambia

“Microgeneration” window

As part of the GET FiT Zambia programme, KfW and the MoE, with financing from the United Kingdom Department for Business, Energy and Industrial Strategy (BEIS), are jointly investigating the feasibility of an innovative 5 MW Solar PV window, a competitively tendered investment opportunity targeting Zambian companies and investors.

The GET FiT Zambia Microgeneration window will target up to five 1 MW grid-connected solar PV plants co-located on a single plot of land. It seeks to address concerns voiced by the Zambian private sector regarding the ability of local developers to meet the stringent selection criteria set for the competitive procurement programmes such as the 120 MW Solar PV tender and Scaling Solar, which required a track-record in solar PV development. The microgeneration window will provide an opportunity for local developers to build competence that can serve as a steppingstone for participation in international tenders.

The microgeneration component of GET FiT Zambia was initiated in mid-2020 and will be implemented in two phases, subject to positive conclusion of the first phase and approval of phase 2 by the funders. The first

phase is currently underway and involves a feasibility study to propose a design and establish the technical, economic, and financial viability of a microgeneration tender. The studies also include assessments of land suitability and potential environmental impacts, land ownership/leasing, grid connection and operations, and possible off-take and financing arrangements.

If the findings of the feasibility study are positive, and Viability Gap Funding can be secured, a second phase will be launched to execute the microgeneration tender. It is foreseen that the opportunities presented through the microgeneration window will pave the way for local investment, ownership, employment and capacity building in the evolving renewable energy market in Zambia. ■



A Sector Wide Approach

With the objective of improving the investment framework for private sector investments in small renewable energy at large, GET FiT Zambia is more than a renewable energy procurement programme. GET FiT therefore has a strong focus on activities that go beyond the implementation of the tender, aiming at leaving capacity to continue on the climate friendly path towards a sustainable energy future.

In implementing the programme in close collaboration with the Ministry of Energy and other main stakeholders, GET FiT actively identifies opportunities and synergies with other activities in Zambia, aimed at improvement of capacity and procedures, and sharing knowledge about best practice in renewable energy procurement.

In light of the delays experienced in relation to the implementation of the Solar PV projects as well as the launch of the SHP tender, the emphasis on the sector-wide value proposition of the programme was further strengthened in 2020. An ever-stronger effort will be put into ensuring that GET FiT continues to provide value to Zambia during the period with lower activities

on these programmes and creates lasting impacts in the form of a stronger framework for renewable energy development in the longer term perspective.

Strengthening capacity for Renewable Energy Development

The **GET FiT Technical Assistance Facility** (the TA Facility) is specifically put in place to provide technical assistance to the programme's main stakeholders in areas that may need strengthening to improve and operationalise the regulatory and administrative environment for private sector investment in small scale renewables and to ramp up required technical skills. The Secretariat manages the TA Facility funds and





actively identifies relevant topics for assignments and studies to be conducted or outsourced to specialised experts.

Capacity building is also provided as an integrated part of the Programme Implementation Consultant's daily activities. Various experts within engineering, finance, procurement and other fields relevant for renewable energy development that are involved in the implementation, work closely with stakeholders to ensure that the GET FiT process is safely embedded among capable and knowledgeable actors and leaves a trail of replicable and standardised processes for future renewable energy development.

The establishment of a strong and favourable framework for small-scale renewable energy investments is a core objective of GET FiT Zambia. The Secretariat consistently collaborates with the Department of Energy (DOE) and the Office for Promoting Private Power Investment (OPPPI) to establish transparent and efficient procedures for Independent Power Producer (IPP) management through, for example, standardisation of procedures and documentation. Standardisation of the commercial and legal contractual framework for IPPs is one aspect of such support. Additionally, the Secretariat and the DOE/OPPPI have closely collaborated in the implementation of the prequalification process for the Small Hydro tender and the application and approval process for hydro-

power site FSRs, building a stronger basis for future efficient and transparent rounds of approvals run by DOE and OPPPI.

As one example, **effective grid integration** to ensure efficient power system operations is a central topic for the GET FiT programme and the TA Facility. The Secretariat's close cooperation with ZESCO in planning for grid integration of GET FiT projects combined with various studies and other technical assistance aims to ensure future efficient management of a power generation portfolio characterised by an increasing number of small, independent renewable energy power producers.

GET FiT Zambia also places strong emphasis on **environmental and social sustainability**, in particular ensuring compliance of projects with the International Finance Corporation (IFC) Performance Standards. The experience from GET FiT Uganda has shown that early interventions to support developers and strengthen Environmental and Social (E&S) capacity has a positive effect on project compliance throughout development and implementation of the projects. Observed benefits include reduced project implementation timelines and improved prospects for reaching financial close. Building on this experience, E&S sustainability and compliance with both Zambian and international regulations is emphasised throughout the implementation of GET FiT Zambia.

Improving the Zambian Power Development Framework (ZPDF) and Licensing Framework for IPPs – Partnership with IAEREP

GRZ with the support of the European Union (EU) is implementing the “Increased Access to Electricity and Renewable Energy Production” (IAEREP) Technical Assistance project, whose overall objective is to increase access to clean, reliable and affordable energy and promote renewable energy production and energy efficiency across Zambia. GET FiT Zambia and IAEREP have identified areas of synergy given some of their common objectives, and in early 2019 agreed to cooperate to support GRZ in its endeavour to strengthen the IPP licensing framework, including recommending revisions to and greater alignment between existing regulatory licensing and permitting processes.

The project aims at putting in place a more streamlined and bankable licensing process for IPPs and mini-grids and provide appropriate guidance to private sector entities seeking to invest in the power sector in Zambia on all the required regulatory and legislative processes.

In the first phase in 2019, the team of consultants collected inputs, concerns and recommendations for an initial analysis of the existing regulatory process through consultations with developers, financiers and statutory bodies as well as desk studies on regional licensing best practices. The Electricity Act No. 11 of 2019 and Energy Regulation Act No. 12 of 2019

provides an important premise for the ZPDF and IPP Licensing Framework.

The work continued in 2020 and in December 2020, the OPPPI held a two-day stakeholder validation workshop aimed at soliciting inputs on the current regulatory and procurement framework from both Government institutions as well as the private sector. The second phase of this process entails conducting a gap analysis and identifying areas for improving and streamlining the procurement, as well as licensing and permitting processes of various Government institutions. The outputs will be aligned to recommendations being made under the IPP Licensing Framework, which aims to clarify and streamline the electricity generation licensing approval process.

Hydropower operations in a new reality of increased shares of RE - The MUST project

The future inclusion of an increased share of intermittent, or variable, sources of energy into the Zambian power mix, will impact the operation of the Zambian power system, where hydropower makes up about 80% of installed power generation capacity. The addition of a further 120 MWp represented by the GET FiT Zambia Solar PV project portfolio may impact both grid stability and the operations of existing power plants. Inclusion of new sources of power may also have financial and economic impacts on existing sector participants, such as ZESCO.

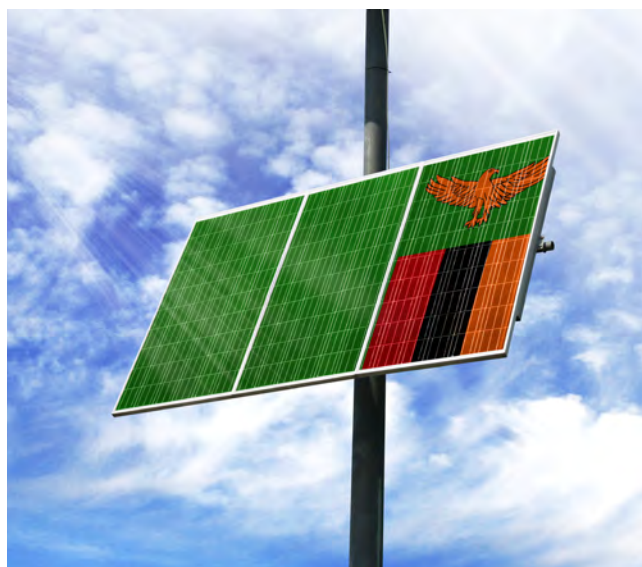


Photo: millenius / Adobe Stock





In response to this, GET FiT Zambia supported ZESCO in assessing impacts and potential challenges as well as benefits related to inclusion of not only the GET FiT Solar PV projects, but a total portfolio of up to 900 MW of solar power. The study was implemented through the GET FiT TA Facility as part of Multiconsult's summer student programme, ["MUST Renewable Energy"](#).

The students participating in the study came from a variety of study fields including electrical, mechanical, hydrological and economic, and undertook the bulk of the research, under close supervision and direction by Multiconsult's experienced experts.

The study used one of ZESCO'S large hydropower plants as a study case to assess possible electrical, mechanical, hydrological and economic impacts in the form of wear and tear on mechanical equipment; effect on water flow and eco-systems downstream of the hydropower plant; cost of generation and power purchase; and relevance for Zambia's role in the regional power system.

The study provided a convincing case for Zambian energy sector stakeholders that, overall, solar power is technically manageable and represents significant net economic benefits for Zambia. The wear and tear on hydropower installations as well as the possible impact on the downstream environment are manageable and likely to be more than compensated for by the potentially important cost savings. The possible role Zambia could play within the regional power system as the region's "battery", if successfully harnessing the solar resource, may be an additional benefit.

Feedback and insights from ZESCO and the students on the research can be found in the section below titled ["Research on RE impact on hydropower operations: Interview with ZESCO and the MUST students"](#).

Further information about the study and results can be found in the article [Research on intermittent renewable energy's impact on hydropower operations](#) published on the GET FiT Zambia web page.

New activities in the GET FiT Zambia Technical Assistance Facility

Two new Technical Assistance activities have been initiated in 2020 with implementation start expected in 2021. This includes the development of a short-term grid development plan for Zambia specific to SHP projects under the GET FiT programme, and support to the Energy Regulatory Board in establishing regulations for the “Open Access” regime, which came into effect with the promulgation of the Electricity Act No. 11 of 2019.

The success of GET FiT strongly relies on the successful grid integration of the renewable energy projects into the grid, laying the basis for a future with an ever-growing share of renewable energy and an increased number of IPPs supplying power to the grid. The consultant assignment to develop a **short-term grid development plan for Zambia** was successfully procured in 2020 and awarded to the consultancy CESI SpA. The work is expected to start in January 2021. The objective of the study is to recommend network reinforcement options that can be implemented

within a short timeframe. This would address identified constraints and enable technically feasible integration of future renewable energy projects, especially in the North and North-western region of the country where there is high potential for clusters of small hydro projects, but where the grid infrastructure could be a limitation. The study will also consider the electrification potential in these areas. As such, the study aims at providing a sustainable plan that can be of value to the Zambia energy sector for the development of renewable energy.

The Electricity Act No. 11 of 2019 has made provision for open access to the transmission and distribution networks in order to facilitate power trading between generating companies and end-use customers. The ERB has been tasked with the development of open access regulations as well as a transmission pricing methodology that will enable the open access market regime. The MoE has received technical assistance (TA) support from the German Government, with KfW, confirming funding support within the TA scope of the GET FiT Zambia programme. ■

Research on RE impact on hydropower operations: Interview with ZESCO and the MUST students

The study on inclusion of intermittent renewable energy into the Zambian energy system was conducted by Multiconsult students, supervised by in-house Multiconsult experts and experts from ZESCO's transmission and distribution team. The MUST student program usually involves a field trip in order to conduct interviews, stakeholder meetings, data collection, site visit and more. Due to the COVID-19 pandemic, it was not possible to organize a field trip during the MUST 2020 summer program.

Interviews about the project have been conducted with the students and ZESCO's technical experts. In this interview, ZESCO's technical experts share their insights from working with the students, as well as key takeaways on the research.

What are the most interesting findings/ insights from the study from ZESCO's perspective?

That the introduction of Renewable Energy will be able to translate into benefits such as banking of water during the dry years.

Which aspects of the hydropower operations are ZESCO most concerned about?

Operation of the generation units within the allowable range is one of our concerns. We are also concerned about the frequency of START/STOP of the units due to the integration of Renewable Energy.

What would have been interesting to look further into?

We would be interested in knowing the limit of intermittent Renewable Energy integration into the ZESCO grid for each of the years between 2021 and 2040 (taking into consideration the dynamic response of the network).

What does ZESCO plan to investigate further?

We plan to undertake further studies into the hydrological conditions of various river basins for the next 20 years in order to estimate how much energy deficit we are likely to incur. We would be interested in knowing the limit of intermittent Renewable Energy integration into the ZESCO grid for each of the years between 2021 and 2040 (taking into consideration the dynamic response of the network).

What was ZESCO's experience of using a student team for this type of study?

Our experience was very good. We were able to contribute with our experience in areas where the students were lacking insight, and the students were able to use time and their theoretical knowledge to assess the research questions. It must be emphasized that most of the findings were consistent with what various consultants have done.

The summer students were Håvard Næss, Guido Cimadamore-Werthein, Lars Falsen Habostad, Helga Løset Skodjereite. Lars Falsen Habostad is currently working on his master thesis on the Zambian power system. He is studying electrical engineering with major in energy and environmental engineering at the Norwegian University of Science and Technology (NTNU). In this interview, he shares some thoughts on working with ZESCO on this project.

The client and stakeholders were located in Zambia, while you were working from Oslo. How were you able to communicate and coordinate with them?

It worked surprisingly well to communicate with the client virtually, through Zoom. However, processes took more time than they probably would if we could meet the persons face to face. It was also challenging sometimes to coordinate who were the ones responsible from the client side for different inputs and data. Once we had worked that out, it was easier to know

who to approach. Everyone being in the same new situation meant that everyone has adjusted to make cooperation possible.

How could the study have been enhanced through a field visit?

As most of the study was done through literature review, desktop research and analysis, I think we were able to get almost as good results as if we had conducted a field trip. However, it would have been possible to take a closer look at the water basins to consider environmental and social impacts, and also take a closer look at the mechanical components. And of course, we would have very much liked to visit Zambia and meet the client and stakeholders, which would also have improved the coordination as mentioned.

What delimitations in the scope did you have to make? What aspects would you have liked to research further if time and budget had allowed?

We had to use one generic day as the scenario for analysis. It would have been interesting to look at more scenarios to evaluate the sensitivity and robustness of the results. For instance, to consider one whole year, or even several years with varying weather conditions. ZESCO would ideally have liked even more detailed results on the impact on the mechanical equipment. Our findings were mostly based on the literature review, it could be interesting to analyse the impacts based on the actual equipment.



How do you think study can be of use for managing Zambia's power system?

I think the study was able to provide some comfort that the technical challenges are not too great. However, in order to harvest the potential economic benefits, the regulatory and financial aspects need to be in place. Although it is not directly transferable, the study could also be used to give indications for other countries with hydropower-based power systems.

You will continue to focus on Zambia in your master thesis – what is the topic?

Yes, I found Zambia as a case very interesting through the MUST project, so I have chosen to continue to study the Zambian power system. The aim of my thesis is to evaluate what the optimal portfolio of renewable energy will be for Zambia. I will build a technical-economic optimization model to analyse the mix of hydropower, solar and wind power. Some interesting reflections will be the role of hydropower going forward, as risk increases with climate change that leads to more drought and less predictable supply of water. I would also like to investigate whether the grid will be able to manage the optimal level of renewable variable energy. ■

“We would like to wish Lars Falsen Habostad well as he undertakes his Master Thesis study on the Zambian power system. We are hopeful that the study will provide us with more information on the impact of VRES integration on the national grid. This information, which will complement results from other studies that have been undertaken by respective consultants, will support the decision-making processes with the electricity supply industry in Zambia.”

– Dr. John Kunda
ZESCO



Other GET FiT Initiatives

GET FiT Uganda



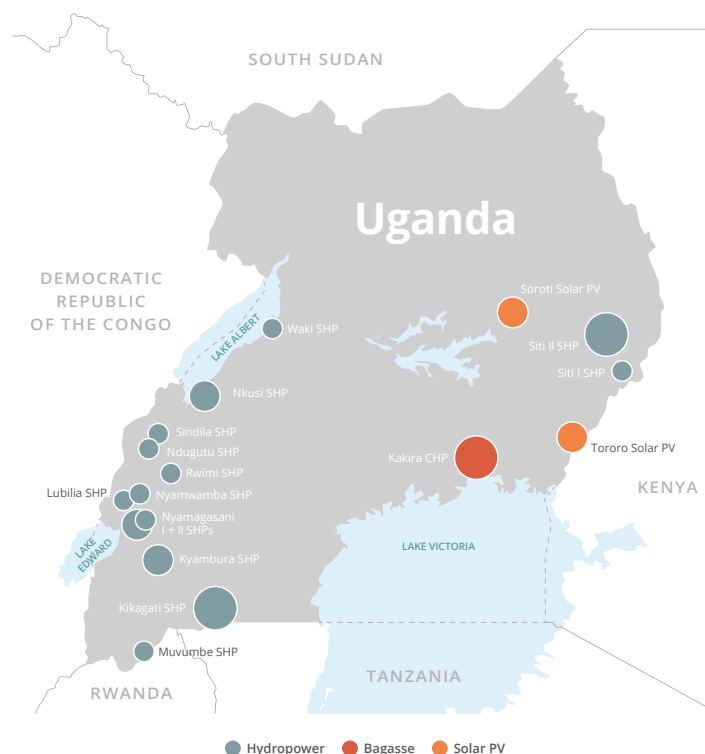
GET FiT Uganda is the first roll-out of the GET FiT programme. It is designed to leverage private investments into renewable energy generation projects in Uganda. The programme is fast-tracking a portfolio of 17 small-scale renewable energy (RE) projects, promoted by private developers and with

a total installed capacity of 158 MW, yielding approximately 765 GWh of clean energy production per year. GET FiT Uganda has been developed by the Government of Uganda and the Electricity Regulatory Authority (ERA), in close cooperation with KfW Development Bank. GET FiT is being supported

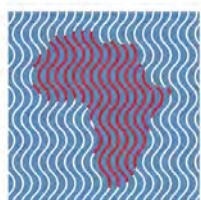
by the Governments of Norway, the United Kingdom, Germany and the EU.

With 14 new power plants built in no more than six years (and three more yet to come), GET FiT Uganda has proven its unique ability to attract private sector investments. As of 2020, the Programme has leveraged over USD 455 million in private investments. Furthermore, with a high level of construction activities, job creation from the portfolio is substantial – amounting to over 10,000 jobs (full-time equivalent).

The three remaining projects are expected to commission in 2021, bringing the full GET FiT portfolio to fruition. For more information on GET FiT Uganda, please visit the website www.getfit-uganda.org.



GET FiT Mozambique



GET FiT MOZAMBIQUE

Mozambique is generously endowed with renewable energy resources – with about 18 GW in hydropower potential and favourable conditions for electricity production from solar, wind and biomass. However, the country is still suffering from electricity access rates of 34%. The utility EDM opera-

tes about 0.5 GW of generation capacity, falling short of meeting current demand. Several market barriers hamper the development of the energy sector – particularly relating to private sector investments. The third roll-out of the GET FiT concept in Mozambique aims at improving these framework conditions for private investments in renewable energy, to support a climate friendly development, lower greenhouse gas emissions and reduce poverty.

The Programme is implemented over an initial four-year period and is expected to launch in 2021. At the core of the Programme is procurement of generation capacity, partly with energy storage. The first round will include a reverse auction of up to 32 MW of solar PV with storage.

Furthermore, the Programme consists of several instruments to support the development of the energy sector in Mozambique:

1. **Viability Gap Funding** – Supplementation of the feed-in tariffs to a cost-covering level
2. **Grid Integration Facility** – Financing of grid connection costs for subsidised power generation plants from private developers (IPPs)
3. **Risk Mitigation Facility** – Risk Coverage Guarantee Facility for IPPs
4. **Technical Assistance Facility** – Capacity building at the partner institutions through technical support and supervision of the IPPs.

The Government of Mozambique and KfW signed the Financial Agreement for the Programme in 2019. The German Government has provided a EUR 25 million grant for its implementation. The Ministério dos Recursos Minerais e Energia (MIREME) is the Programme Executing-Agency.

Procurement of the Programme Implementation Consultant for GET FiT Mozambique is underway, with an expected implementation start in 2021.

For further information about the Programme, please visit the website www.getfit-moz.org. ■

Outlook

Zambia, like most countries, is expected to continue its battle with rising COVID-19 cases, in particular after the second wave of infections hit the country towards the end of 2020 and beginning of 2021. How countries will eventually recover from COVID-19 effects will vary across the globe, and with vaccines being approved for roll-out there is some hope in the outlook for 2021.

With regards to the economic landscape the Government has launched in late 2020 an Economic Recovery Programme which lays out a roadmap of strategic policy actions. Decisive implementation of the ERP combined with the engagement of the International Monetary Fund (IMF) and G20 to restructure the country's debt could help revive the economy and place the country on a path of sustainable growth and development.

It is expected that investors will continue to keep a watchful eye on continued commitment and reform progress through the initiatives outlined in the EPR, as well as the developments in the energy sector. The energy sector reforms, including having a clear path towards ZESCO's financial sustainability and reduction of arrears, will be of particular interest.

GET FiT Zambia will continue to monitor these developments closely as it remains acutely aware of their importance in ensuring that the Solar PV projects are able to achieve financial close and ensure the realisation of their beneficial Solar PV tariffs. It is also expected to pave a clear pathway for the continuation and the launch of the SHP tender.

In the meantime, GET FiT Zambia is set to continue its activities during 2021.

The key focus will be capacity building and technical assistance activities, aimed at creating an enabling environment for the implementation of renewable energy projects, in line with the key programme objectives. These initiatives include:

1. The development of a short-term grid development plan to enable future integration of renewable energy projects, with specific focus on the areas where there is high concentration of small hydro projects. The consultant CESI SpA has been appointed following the outcome of tender undertaken by the GET FiT Secretariat in support of the MoE and ZESCO.
2. Technical support and advice to the ERB and MoE in the development of the open access market regulations.
3. Using the opportunity created by the new regulations to investigate an alternative bankable off-taker structure that could be considered for projects under the GET FiT Small hydro tender, or other renewable energy project developments. Continued engagement with the Solar PV and Hydro Programme developers
4. Continued capacity building within the MoE. An important contribution to a favourable investment framework for small scale renewable energy development in the future is the support to develop a standardised framework for approving feasibility study rights in line with the legislative requirements; as well as the continued collaboration with the EU programme in supporting the development of a ZPDF and improved licensing framework. ■
- 5.



**GET FiT Zambia
Annual Update 2020**

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**GET FiT Secretariat
c/o Multiconsult Norge AS**
Energy Regulation Board –
Main Building
Ground Floor – Room 101
Danny Pule Road
Lusaka, Zambia
info@getfit-zambia.org

**Multiconsult Norway
– Headquarter**
Nedre Skøyen vei 2
0276 Oslo
Norway
+47 21 58 50 00
energi@multiconsult.no

KfW
Marco Freitag, Principal Project
Manager
KfW Bankengruppe
LAd4 - Infrastructure Southern
Africa
Palmengartenstr. 5-9
60325 Frankfurt
Germany