

### **Annual Update**

Year in review

Multiconsult







# Acronyms

DOE	Department of Energy		
GET FIT	Global Energy Transfer Feed in Tariff		
REFIT	Renewable Energy Feed in Tariff		
ERB	Energy Regulation Board		
KfW	German Development Bank		
TA	Technical Assistance		
VGF	Viability Gap Funding		
MWDS	Ministry of Water Development and Sanitation		
MFNP	Ministry of Finance and National Planning		
MGEE	Ministry of Green Economy and Environment		
MOE	Ministry of Energy		
REA	Rural Electrification Authority		
ZEMA	Zambia Environmental Management Agency		
WARMA	Water Resources Management Authority		
NHCC	National Heritage Conversation Commission		
CEEC	Citizens Economic Empowerment Commission		
OPPPI	Office for Promoting Private Power Investments		
PV	Photovoltaic		
EMA	Environmental Management Act		
MW	Megawatts		
SHP	Small Hydro Power		
RfP	Request for Proposal		
RE	Renewable Energy		
IA	Implementation Agreement		
IMF	International Monetary Fund		
IPP	Independent Power Producer		
8 <sup>™</sup> NDP	Eighth National Development Plan		
ZRA	Zambezi River Authority		
ZPC	Zimbabwe Power Company		
STGD	Short Term Grid Development		
COSS	Cost of Service Study		

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## Message from the Ministry of Energy

In 2023, the country continued to experience energy deficits caused by effects of climate change evidenced from the below normal rainfall experienced during the 2022/23 rain season. This phenomenon resulted in reduced water inflows in Zambezi and Kafue River basins that supply 80 percent of Zambia's electricity demand. Subsequently, power generation capacity diminished by about 400 MW, resulting in load-shedding.

The foregoing, prompted the Government to embark on diversifying the energy mix. In line with Government aspirations, the GET FiT Zambia Programme provides a long-term solution to support the Government's energy diversification agenda. Therefore, the Government remains committed to ensuring that the 120 MW solar-PV projects awarded in 2019 under the GETFIT Programme come to fruition as soon as possible.

During the period under review, significant strides were made towards meeting prerequisites stipulated by lenders for providing finance for the GET FiT Zambia 120 MW solar PV projects. While the debt restructuring conclusions were delayed, progress had been made on addressing most of the requirement's lenders had given as imperative before they could consider financing the GET FiT Projects. In addition to the economic updates, engagements were made with the lenders through the Ministry in the first half of 2023, following which some lenders have since expressed renewed interest in financing the GET FiT Projects on agreed terms and conditions. In 2024, we look forward to the projects attaining financial close and moving closer to the commencement of construction, which will see 120 MW of solar power on the grid.

The Government also continues to foster growth in the sector with progress on open access to electricity. Following the development of an electricity Open Access framework comprising Open Access Regulations, Market Rules and Guidelines, Open Access Market Structure and Design, and Transmission and Distribution Methodology, the Government looks forward to implementing the approved framework in 2024.

I wish to thank the German Government for their unwavering support towards Zambia's energy sector, despite the challenges experienced. I further wish to thank all Cooperating Partners, financiers, developers and key stakeholders in the energy sector for their support.



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**Eng. Peter C. Kapala** *Minister of Energy* 

# Acknowledgement from PS

The Ministry of Energy (MoE) wishes to express deep appreciation to our partners who support the development of the Global Energy Transfer Feed in Tariff (GET FiT) Zambia Programme. This programme is designed to ensure that Zambia promotes private sector participation and diversifies its energy mix through the implementation of low-cost renewable energy projects.

Sincere gratitude goes to the German Government and the German Development Bank (KfW) who are our implementing partners. KfW have provided financial support in form of Technical Assistance, Viability Gap Funding (VGF) and the Grid Facility.

Further and on behalf of the Ministry of Energy, I wish to express my particular special words of thanks to the following line Ministries, Government agencies, departments, and institutions for their support:

- Ministry of Finance and National Planning (MFNP), Ministry of Justice (MOJ), Ministry of Green Economy and Environment (MGEE) and Ministry of Water Development and Sanitation (MWDS);
- ZESCO Limited, Rural Electrification Authority (REA), Zambia Environmental Management Agency (ZEMA), Water Resource Management Agency (WARMA), Energy Regulation Board (ERB), Citizens Economic Empowerment Commission (CEEC), and National Heritage Conservation Commission (NHCC).

The programme's ultimate success will depend on all stakeholders' commitment and invaluable contributions.

We look forward to your continued support as we work towards successfully implementing all initiatives under the GET FiT Zambia programme.



Peter Mumba Permanent Secretary – Technical Services Ministry of Energy

Contributing to a climate-friendly development path and sustainable growth in Zambia

# About GET FiT Zambia

GET FiT Zambia is the implementation programme for the Government of Zambia's REFiT Strategy, which aims to facilitate private sector investment in small and medium-scale Renewable Energy Independent Power Projects (IPPs) in Zambia.

GET FiT Zambia is financed by KfW, on behalf of the German Government. The Zambian Ministry of Energy (MoE) is the Project Executing Agency (PEA) responsible for the programme. The GET FiT Secretariat (led by the Programme Implementation Consultant, Multiconsult Norge AS was appointed in 2018 to work with the Department of Energy (DoE) to implement the programme.

GET FiT Zambia is the second roll-out of the GET FiT concept after a successful pilot in Uganda, where it achieved approximately 160 MW of installed renewable energy capacity via 17 projects. GET FiT Uganda established a track record for private sector participation. GET FiT Zambia has been designed based on various lessons learned and onthe-ground experience in Uganda – while considering the country-specific circumstances and barriers to private sector involvement. GET FiT Zambia is implemented by the Ministry of Energy (Department of Energy), in collaboration with KfW

### The objectives of GET FiT Zambia are:

- Procurement of up to 220MW 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 in terms of technology and geography) while ensuring cost-effective, environmentally, and socially sustainable projects to maximise value for Zambian end users.
- Introduction of standardised legal documentation for Independent Power Producers (IPPs) and framework that will enable successful integration of the procured renewable energy into the national grid.
- Promotion of competition and private sector participation in the Zambian power sector.

### **Programme Structure**

GET FiT Zambia is motivated by acknowledging the wide range of positive, sustainable effects that the development of renewable energy projects can have for economic and social development and the strong potential for such projects in Zambia. At the heart of the programme is the realisation of 220 MW low-cost renewable energy capacity, procured from private sector entities through a competitive procurement process:

- 120 MW Solar PV
- 100 MW Small Hydropower

Additionally, GET FiT Zambia aims to boost institutional capacity and improve the investment framework for private sector participation in the Zambian power sector. A key feature is to introduce a transparent renewable energy tender process, advocate for more streamlined licensing and permitting processes and strengthen power grid operations to procure and integrate even more renewable energy in the future.

The up to 220MW is to be achieved through procurement of power from private sector Independent Power Producers (IPPs), in alignment with Zambia's Public Procurement Act and based on international competitive bidding. Under the procurement framework, the IPPs are responsible for their own site selection, feasibility studies, and financing (including debt and equity). The current 41 million Euro grant funding under the GET FiT Zambia programme is thus not aimed towards providing debt financing to individual projects. Instead, it is aimed at assisting the Ministry of Energy with developing a sustainable procurement framework, boosting institutional capacity, importantly, improving the investment framework for private sector participation in the Zambian power sector. If necessary, the grant will provide a subsidy to cover any viability gap between the cost-reflective tariff and the PPA tariff or be utilised towards the grid facility. The GET FiT Zambia programme was tailored to address the challenges stakeholders regarded as barriers to achieving these objectives. It is envisaged that by addressing these challenges, a good foundation and framework can be laid that will facilitate future lowcost procurement of energy from private sector entities in Zambia:

GET FIT TOOLS	BARRIER DESCRIPTION Reliable Procurement Framework & Improved Investor Conditions	<ul> <li>MECHANISM FOR ADDRESSING THE BARRIERS</li> <li>Design &amp; implement a reliable, competitive tender process and work with Ministry of Energy (MoE) to ensure it can be replicated for future rounds.</li> <li>Design standardised project agreements, incl. Power Purchase Agreement (PPA), Grid Connection Agreement (GCA) and Implementation Agreement (IA).</li> <li>Identify bottlenecks &amp; advise on streamlined licensing &amp; permitting process.</li> </ul>
DEBT & RISK MITIGATION FACILITY	Risk Mitigation Tools to ensure access to funding & achieve bankability	<ul> <li>Identify appropriate risk mitigation tools that will enable small to medium size investors to access finance and achieve bankability.</li> <li>Collaborate with Africa Trade Insurance (ATI).</li> </ul>
VIABILITY GAP FUNDING	High Cost of Capital availability	<ul> <li>GET FiT offers tariff-based support in the form of Viability Gap Funding (VGF) for a limited portfolio of Renewable Energy projects.</li> <li>VGF facilitates project viability by providing a capital grant to private sector entities willing to take the risks of invest- ing into an evolving renewable energy market in Zambia.</li> <li>Requirement for VGF expected to reduce, with increasing investment, economies of scale &amp; improved investment framework conditions.</li> </ul>
GRID FACILITY	Grid availability	<ul> <li>Includes advisory support.</li> <li>Provide capital grants, to the awarded SHP developers, for the construction of the grid construction &amp; selected network reinforcements to enable the integration of Small Hydropower (SHP) and other future renewable energy technologies. The grid assets will remain the ownership of ZESCO.</li> </ul>
TECHNICAL	Capacity Constraints & Skills Gap	<ul> <li>Capacity building programme for key sector stakeholders as part of the Technical Assistance (TA) facility</li> <li>TA support earmarked for supporting the SHP portfolio.</li> </ul>

GET FiT Zambia toolkit for addressing barriers in the power sector

### GET FiT Programme, Stakeholders and Partners:

The following entities have been identified as the key stakeholders and partners in fulfilling the GET FiT objectives.

- The Ministry of Energy, through the Department of Energy, is responsible for developing and implementing policies, programmes and projects on renewable energy, energy efficiency, electricity and power development to facilitate socio-economic development. The functions of the department include:
  - Facilitating the development and review of policies and legislation on energy to provide an appropriate framework for the effective management and implementation of programmes.
  - Facilitating the construction, rehabilitation, and maintenance of energy infrastructure to ensure the security of supply.
  - Promoting the development and utilisation of climate-resilient and renewable energy technologies.
  - Promoting the development and utilisation of climate-resilient and renewable energy technologies.
  - Maintaining a database on energy resources, production, distribution, consumption, and pricing.
  - Formulating and reviewing energy strategy and action plans to facilitate resource mobilisation and attaining set objectives.
  - Providing technical guidance and support to stakeholder institutions on matters relating to efficient management and conservation of energy

Under the DoE are several units that assist the Ministry in achieving its objectives, including the Office for the Promotion of Private Power Investment (OPPPI).

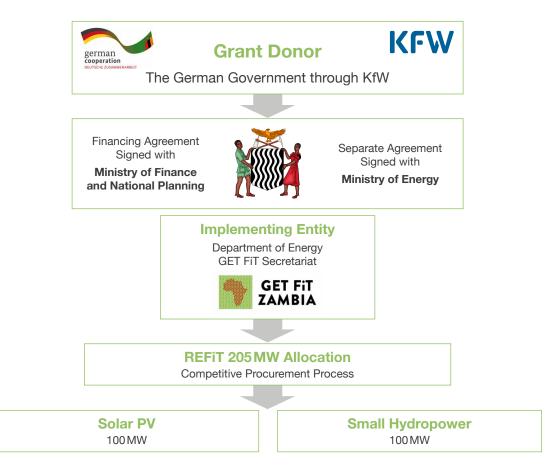
- The Office for Promoting Private Power Investment (OPPPI) OPPPI is a project unit established under the Ministry of Energy for the purpose of promoting private sector participation in developing and implementing power projects.
  - The OPPPI coordinated the implementation of significant private sector power projects

such as the 300 MW Maamba Coal Fired Power Plant, 120 MW Itezhi-Tezhi Hydroelectric Power plant, 750 MW Kafue Gorge Lower Hydroelectric Power Project and the Zambia-Tanzania-Kenya Power Interconnector Project. The OPPPI is currently coordinating feasibility studies for a combined capacity of over 2000 MW, with some projects currently at the Power Purchase Agreement (PPA) negotiations stage.

- Energy Regulation Board (ERB)– The ERB is mandated to ensure effective energy sector regulation. The ERB does this through issuing licenses to undertakings, monitoring the efficiency and performance of undertakings, receiving and investigating complaints, approving the location and construction of energy infrastructure, price adjustments of energy services and products, and developing standard codes, guidelines, and other regulatory interventions.
- Zambia Environmental Management Agency (ZEMA) – ZEMA is an independent environmental regulator and coordinating agency. ZEMA is mandated to do all such things as are necessary to ensure the sustainable management of natural resources and protection of the environment, prevention and control of pollution. ZEMA was established through an Act of Parliament, the Environmental Management Act (EMA) No. 12 of 2011. The EMA provides for the continued focus on Environmental Management, including new and emerging issues such as climate change, pollution from Persistent Organic Pollutants, and electronic waste.

ZESCO - ZESCO Limited is a power utility owned by the Government of the Republic of Zambia that supplies electricity and energy solutions within Zambia and the Sub-Saharan region. The company is the dominant participant in the electricity market in Zambia. ZESCO Limited is a vertically integrated power utility with operations cut across the electricity value chain, generation, transmission, distribution, and supply. The Corporation owns and operates several hydropower stations with a combined power-generating capacity of more than 3,000 MW.

- The Rural Electrification Authority (REA) REA was established in 2003 by an Act of Parliament to increase electricity access in rural areas. REA utilizes Grid Extension, Biomass, Wind, Solar Energy, and Mini-Hydro to reach its targets. Electricity drives economic productivity, and rural electrification boosts agriculture, commerce, and small-scale industries in Zambia. REA aims for beneficiaries to enjoy improved living standards, better medical care, enhanced agricultural production, and new business opportunities. REA will play a role in the SHP tender.
- The Water Resources Management Authority (WARMA) – WARMA was established under the Water Resources Management Act No. 21 of 2011, serves as the regulatory body responsible for the management and development of the nation's water resources. WARMA's primary aim is to ensure equitable access to water for all stakeholders. Its core objectives include the management, development, conservation, protection, and preservation of both surface and groundwater resources. WARMA is an institution that will play a role in the SHP tender.



GET FiT Zambia Programme Structure

### **Programme Benefits**

GET FiT Zambia programme objectives align with the Government of Zambia's development priorities and implementation strategies, as set out in the Eighth National Development Plan (8th NDP). Amongst the stated objectives is the promotion of green growth to safeguard the environment and natural resources. This is especially important as power from renewable energy sources in Zambia, other than large hydropower, is still low, with electricity generation from solar PV only accounting for 3 percent of the total installed generation capacity and hydropower accounting for over 80 percent. This has made the Zambian energy sector vulnerable to the impacts of climate change, as droughts experienced over recent years have led to lower power production from hydropower, resulting in significant power shortages. Therefore, the diversification of the energy mix becomes critical to ensure a sustainable power supply to meet other stated country priorities, such as annual real gross domestic product (GDP) growth of 4.5 percent by 2026 and increased economic growth from the agricultural, manufacturing, tourism, and mining sectors.

By its design, the GET FiT Zambia programme plays a unique role as a catalyst and enabler to ensure progress towards achieving the country's priorities. Below are some of the specific benefits the programme portfolio brings:

- 120 MW of Solar PV projects will enable diversification of generation sources by adding 120 MW<sub>ac</sub> of climate-friendly Solar PV to the grid, increasing the generation capacity from renewables. This fulfils the medium to the long-term aim of the REFiT Strategy, ensuring that renewables contribute to a diversified energy mix to create increased energy security. The 120 MW<sub>ac</sub> of Solar PV projects are relatively advanced and only need to secure finance and commence due diligence before implementation starts, allowing the projects to be implemented relatively quickly.
- 50 MW Small Hydropower (SHP) projects, as part of the first round of procurement is being targeted in the north and north-western parts of the country where rainfall is the highest. The

Grid Facility under the programme further aims to contribute towards strengthening network infrastructure to enable both the connection and integration of the SHP projects in the northern part of the country. The network infrastructure developed through the deployment of grants will be owned by ZESCO. The deployment of the viability gap funding (VGF), if required, is further aimed at addressing project viability if renewable energy feed-in tariffs (REFiTs) are not sufficient to ensure the project viability. The grants will thus enable the development of key infrastructure while ensuring SHP tariffs remain affordable to the ZESCO and its electricity consumers.

- The GET FiT Zambia projects will represent an increased national electricity generation capacity, which the country needs to address current electricity deficits and to prevent further future deficits. In addition, the investment of diverse technologies in the sector increases private sector participation in the energy sector. It diversifies the Zambian energy mix through solar PV and decentralised SHP deployment. This way, the programme plays an essential role in satisfying current power needs and improving future power supply reliability.
- The programme is carried out through a transparent, competitive procurement process with the involvement of the programme stakeholders, particularly the DoE and OPPPI, who are a central part of the programme implementation team. Other stakeholders, including the Ministry of Justice, Ministry of Finance and National Planning and ZESCO as the off-taker, are also consulted in developing project agreements. The ERB will also play a key role in setting the REFiTs for the SHP programme. This further aligns with the 8<sup>th</sup>NDP objective of ensuring a good governance environment.
- The comparatively lower price achieved through a competitive process will allow ZESCO, as the off-taker, to sell low-cost power purchased to its consumers in Zambia.

- The high cost of capital and inadequate regulatory frameworks for renewable energy have been said to contribute to a low rate of private sector investment in renewable energy due to uncertainties around funding. The GET FiT programme aims to improve the institutional framework conditions, build capacity and establish standardised project agreements for future implementation by the MoE as part of the ownership strategy.
- The continuation of the procurement of solar PV and SHPs will support and enable future power development, particularly the implementation of the Integrated Resource Plan (IRP), currently under development and set to be launched in 2024.
- In summary, GET FiT supports the country's need for consistent long-term planning and project implementation as the country also embarks on activities to increase manufacturing, mining, etc., to move towards economic transformation. With the implementation of the projects over several years, capacity building and job creation will be an added benefit from implementing the GET FiT projects, thereby positively contributing to human and social development.

# GET FiT Zambia – Reflections of the Year in Review

Positive development in the country's macroeconomic environment, coupled with interventions from the Minister of Energy in 2023, brought much-needed favourable wins for the GET FiT programme's efforts to realise the awarded Solar PV projects.

Zambia started the year 2023 with an energy crisis that impacted the nation. The effects of climate change resulted in low water levels at the Kariba Dam, which forced the Zambezi River Authority (ZRA) to restrict the power production for ZESCO and the Zimbabwe Power Company (ZPC). ZESCO was compelled to implement load management for up to 12 hours daily. A successful outcome of GET FiT Zambia has the potential to make Zambia more resilient in tackling the impact of climate change. The 120 MW Solar PV projects, thus, remain critical for the country as they contribute towards increasing the required diversified sources of electricity in the country, which are essential to mitigate power deficits caused by climate change. The need for alternative sources of renewable energy reiterates the need to ensure progress toward financial close and construction of the 120 MW Solar PV projects.

Through the intervention of Hon. Eng. Peter Kapala, Minister of Energy, the prospects to unlock financing for the GET FiT 120 MW Solar PV projects in 2024 are positive. The GET FiT Secretariat, managed by Multiconsult in collaboration with the Department of Energy, arranged a meeting between the Minister of Energy and prospective lenders. The purpose of the meeting was to discuss the challenges and progress made by the government of Zambia in addressing the lender's requirements for financing projects in Zambia. The Minister emphasised the importance of lenders supporting Zambia's ambition to grow its energy portfolio, which was critical to supporting economic growth and increasing energy access. Through this intervention of the Minister, lenders agreed to consider the possibility of financing the GET FiT 120 MW Solar PV projects.

The Solar PV tender's successful bidders continued demonstrating a commitment to the continued development of their projects. While the implementation of the SHP component of the GET FiT programme is still not confirmed, the developers that were pre-qualified through the Request for Qualification (RfQ) process in 2019-2020 have also continued to reconfirm their interest through dialogue and regular follow-up by the Secretariat.

The Secretariat continued engagement to ensure progress on the Open Access Technical Assistance (TA) project. Through support from the GET FiT Zambia Technical Assistance Facility, The MOE and ERB developed an Open Access framework envisaged to be implemented in 2024. These TA activities, ensure that the GET FiT programme continues to contribute towards strengthening the 'framework for enabling and promoting private sector investments in renewable energy' in Zambia.

# Solar PV and Small Hydropower Tender Status

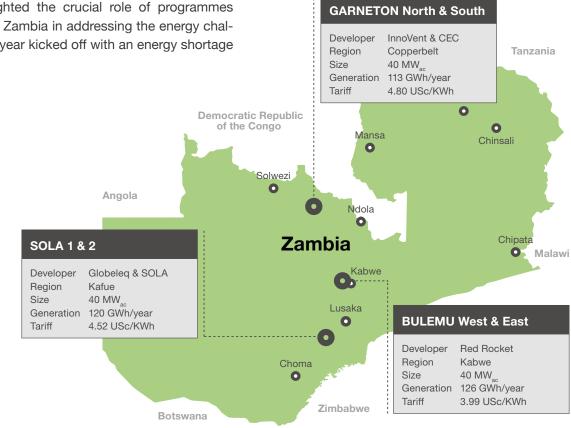
The Solar PV and SHP tenders are two of the main components of the GET Fit Zambia programme, and ensuring progress on these is a key priority for the GET FiT Secretariat

### **Solar PV Tender**

A positive year for GET FiT Zambia - Funding for 120 MW Solar PV projects Unlocked.

In 2023, optimism surrounded the GET FiT Zambia program as Zambia awaited positive developments in debt restructuring. Though delayed, an agreement with official creditors was reached by midyear, easing the economic slowdown and paving the way for unlocking financing amidst the energy shortages faced in the sector

crisis spurred by climate change-induced low water levels at the Kariba Dam, prompting the Zambezi River Authority (ZRA) to restrict the power production for ZESCO and the Zimbabwe Power Company (ZPC). The need for load management measures of up to 12 hours sent a clear signal for the need to unlock funding to allow the implementation of more renewable energy sources to help Zambia diversify its energy mix.



2023 highlighted the crucial role of programmes like GET FiT Zambia in addressing the energy challenges. The year kicked off with an energy shortage

The urgency for renewable power emphasised the need to ensure progress was made on advancing the 120 MW Solar PV projects to financial close and construction. This led to the Minister of Energy requesting a meeting with lenders to understand their requirements for financing private-sector projects in the energy sector in light of the progress made by the government in addressing most of the concerns raised during 2020 when funding was initially suspended.

The meeting sparked interest from a wide range of key stakeholders as it was realized that a collaborative approach would be required to address the sector challenges and unlock funding not only for the benefit of the 120 MW Solar PV projects but the pipeline of future energy projects, including the envisaged SHP projects. The meeting was thus attended by the following key stakeholders: Ministry of Energy, German Cooperation, Foreign, Commonwealth and Development Office (FCDO), KfW, ZESCO, World Bank, Cities and Infrastructure for Growth (CIG) Zambia, and various lenders. The meeting included feedback from ZESCO MD, supported by CIG Zambia, on the sustainability of the initiatives being implemented to ensure financial sustainability. This included feedback on the development of a 10-year rolling strategic plan (2022-2031). Feedback was also provided on the progress made towards its debt reduction efforts, leading to a significant reduction in arrears to Independent Power Producers (IPP). The utility continues to apply more prescribed operational cost containment measures, positively impacting ZESCO's financial position. The 10-year rolling strategic plan (2022-2031) has subsequently been published by ZESCO.

Discussions were also held on the progress related to the implementation of cost-reflective tariffs, with ZESCO submitting its tariff application to the ERB for five years under a Multi-Year Framework Tariff structure. The ERB Board announced new electricity prices, which came into effect on the 1st of May, 2023.



ZESCO Managing Director Eng. Victor Mapani gives an update on ZESCO's progress on its turnaround strategy at a meeting with the lenders convened by the Minister of Energy

Following the meeting, some lenders expressed interest in supporting financing the 120 MW GET FiT Zambia Solar PV projects and supporting the government in meeting the energy shortages, noting the progress made, including on the debt restructuring, despite it not being fully concluded.

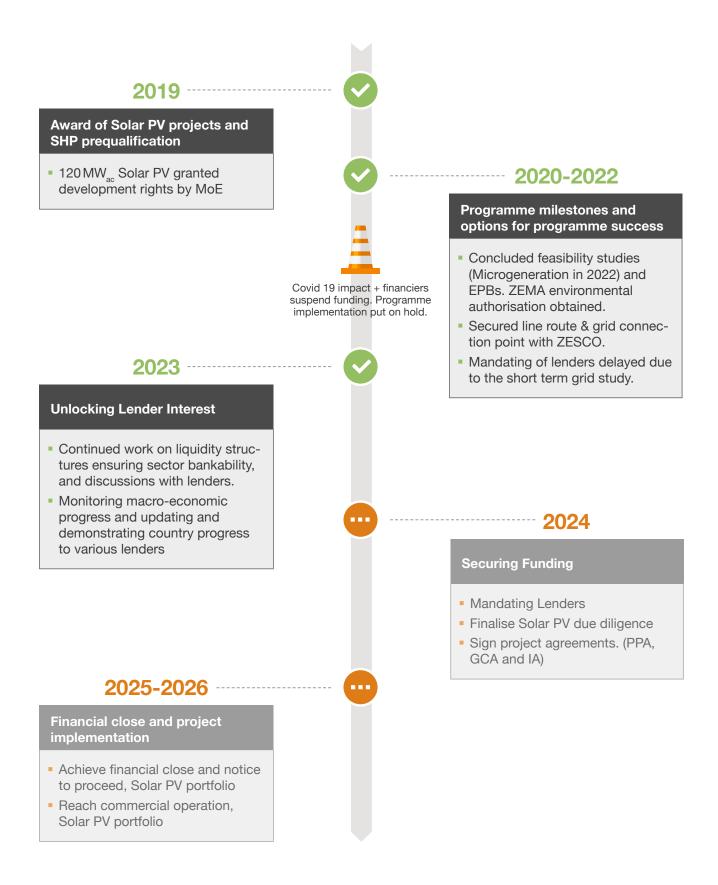
This support enabled the GET FiT Secretariat to work with ZESCO and the Ministry of Energy to address specific requirements that could enable the lenders to present the projects to their respective committees for approval. Following positive conversations with the lenders and successful bidders, the year was closed off with the government stakeholder working group meeting in December 2023 to finalise the GET FiT Zambia project agreements. Notably, this session also featured a pivotal meeting chaired by the Permanent Secretary – Technical Services, Ministry of Energy, engaging with project lenders to navigate the way forward. Through these meetings and interventions, the prospects to unlock financing for the GET FiT 120 MW Solar PV projects in the course of 2024 are now positive.

Staying on course and keeping the project active, despite challenges faced at the time, has thus proven valuable as it enables relatively fast mobilisation of project resources once lenders are secured. This could provide significant lead-time benefits, especially if considered in the context of the urgent need for power in Zambia and across the region.



Post-stakeholder working group meeting. Present at the meeting were: Presidential Delivery Unit, Ministry of Finance, Ministry of Energy, Ministry of Justice, ZESCO, Energy Regulation Board, CIG Zambia, GET FiT Secretariat and Trinity LLP

Timeline showing the most important milestones which have been completed for the two tenders todate, and the envisioned timeline for 2024 through 2026.



### **Small Hydro Tender**

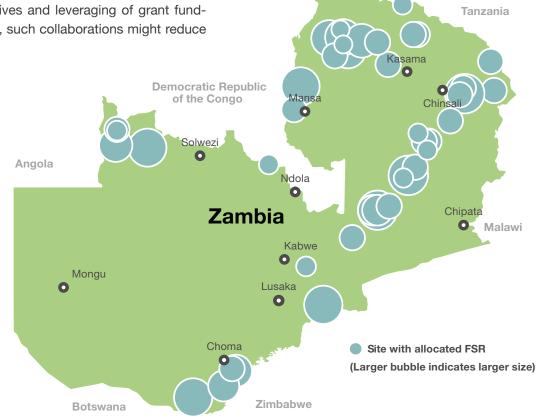
The initial launch of the SHP **request for proposal (RfP)** was planned for the end of the first quarter of 2020. However, the launch was put on hold, initially as a result of COVID-19 and thereafter as a result of lenders notifying the program about their intention to suspend funding to projects in the Zambia energy sector. The RfP remained on hold in 2023, with the prospect of only being revisited once successful bidders for 120MW Solar PV have confirmed that they have mandated lenders and there is a clear pathway to financial close.

This decision was made because, until prospective financiers commit funding to Zambia for the 120 MW solar PV projects, the situation for SHP developers will remain unchanged. Thus, the Secretariat continues its efforts to ensure that challenges addressed under the Solar PV tender can be carried through to the SHP tender to ensure that it would be successful when implementation becomes viable.

In order to increase the available financing for the SHP tender, the Secretariat actively explored collaboration opportunities with donor entities. The benefit of broader donor collaboration has the potential to enable the commencement of the SHP tender through shared implementation costs across various donor initiatives and leveraging of grant funding. Furthermore, such collaborations might reduce the Viability Gap Funding (VGF) requirement if development costs are financed through grants. Advocacy has thus not been limited to the 120 MW Solar PV projects but also the SHP programme.

The GET FiT Secretariat has maintained communication with developers who were prequalified to participate in the SHP tender, ensuring they are kept abreast of all key developments pertaining to the program. Developers prequalified under the GET FiT Zambia Programme currently hold a total of forty-four (44) feasibility study rights granted by the Ministry of Energy to conduct feasibility studies for small hydropower projects, which are reserved for procurement under the GET FiT Zambia Programme.

Zambia has significant potential for generating electricity through small hydropower projects. By executing these projects, the nation can harness this potential to strengthen energy security and establish a favourable investment framework for smallscale renewables, which in turn will contribute to economic development.



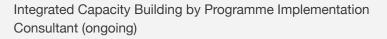
## **Technical Assistance**

GET FiT Zambia aspires to more than being a vehicle to procure and develop energy projects in Zambia. The overall objective of GET FiT is to create a lasting impact in the sector through improving the overall investment framework for renewable energy. The close involvement of relevant government institutions in implementing the programme and providing TA enables experience and capacity building. This way, GET FiT shall contribute to the continued development of renewable energies after the programme implementation period.

The TA components of the GET FiT toolbox aim to boost institutional capacity and enable a transparent regulatory framework for private sector participation in developing the country's renewable energy resources. The TA Facility consists of integrated capacity building through the program's implementation and dedicated TA initiatives. So far, GET FiT has contributed to establishing a renewable IPP framework, developing a Short-Term Grid Development plan (STGD), an open access market structure, rules, and regulations and transmission and distribution pricing methodology to enable the open access regime in the sector. In close collaboration with the MoE and other main stakeholders, GET FiT actively identifies opportunities and synergies with related initiatives in Zambia targeting improved framework and investment conditions.

A description of the work conducted and planned under the Open Access Market, the Short-term Grid Development Plan and GIS implementation is provided below.

Grid studies for integration of renewables (completed)



Legal advisory related to the GET FiT Solar PV Portfolio (ongoing)

Open access market rules and regulations and transmission and distribution pricing methodology (ongoing)

GIS Implementation (planned)



### **Open Access Market**

In 2019, the Government of Zambia launched the new National Energy Policy (2019). The new Energy policy facilitated the enactment of the Electricity Act No.11 of 2019 and the Energy Regulation Acts No.12 of 2019. The new Acts have made provision for Open Access to transmission and distribution networks to facilitate power trading between generating companies and end-users.

However, there are currently no regulations to govern the open access regime. Before finalising the regulations, a process has been undertaken to ensure that the open access regime operates fairly and transparently. An appropriate market structure and design, together with rules that would govern the market, is required.

The ERB was, therefore, tasked with developing the market structure and associated open access rules and regulations and creating a transmission and distribution pricing methodology to facilitate the open access market in Zambia. Through the GET FiT TA Facility, technical assistance is provided to the ERB to support them in the development of this open access market framework.

### **GIS Implementation**

As part of the TA Facility, GET FiT is also assisting the OPPPI with the development of a GIS-based platform to facilitate the digitalisation of the feasibility study rights process. OPPPI plays a central role in this process and aims to improve the application, approval, and monitoring process of renewable energy project developments. The aim is to establish a GIS-based platform containing the most up-to-date information about renewable energy projects in the pipeline. This will also facilitate the management of feasibility study rights issued to various developers. In addition to the value the GIS platform represents for internal portfolio management, it can also be an efficient tool for improved access to information for various market actors interested in the Zambia energy sector. Implementation is now planned for 2024.



Open Access Stakeholder Consultation

# **Other GET FiT Initiatives**

### GET FiT Uganda

GET FiT Uganda was 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 has facilitated a portfolio of 17 small-scale renewable energy projects promoted by private developers with a total installed capacity of 158 MW and a planned yield of 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 the KfW Development Bank. GET FiT is being supported by the Governments of Norway, the United Kingdom, Germany, and the European Union (EU). All of the 17 projects, including small hydropower, solar PV, and biomass projects, are operational since 2021. With this achievement, GET FiT Uganda has demonstrated its unique ability to attract private sector investments, leveraging over USD 455 million in private investments. Furthermore, the programme has contributed to the local economy by creating over 14,000 jobs (FTEs). As programme activities will come to an end in 2024, the main focus will remain on addressing deemed energy challenges in the GET FiT portfolio, and associated grid improvements.

For more information on GET FiT Uganda, please visit the website www.getfit-uganda.org.





GET FiT Uganda project portfolio

### **GET FiT Mozambique**

GET FiT creates an opportunity for Mozambique to harness its largely untapped renewable energy (RE) potential by leveraging private sector participation. Building on experience from Uganda and Zambia, the Programme will provide support to un-locking investments in RE projects by improving the private investment framework conditions.

GET FiT Mozambique promotes various incentives to leverage private investments for RE projects with high socio-economic impacts. Combined, the German Government and the European Union through KFW have committed grants of up to EUR 68 million to the Government of Mozambique, aiming at leveraging additional private investments of at least EUR 100 million for the following three components of GET FiT Mozambique:

- GET FiT Mozambique I: Solar PV plus storage, grid connected; tender preparations ongoing (financed by German Cooperation)
- GET FiT Mozambique II: At least 25 MW hydro power, on-grid connected: implementation planned to commence in 2024 (financed by the European Union within the Green Deal Team Europe Initiative for Mozambique, in line with the EU Global Gateway initiative)
- Off-grid component (Green People's Energy for Africa: Mozambique): Rural mini-grids, combined up to **3 MW**; tender preparations ongoing (financed by German Cooperation)

### **Programme context:**

The Government of Mozambique (GoM) aims to achieve universal energy access by 2030, facing challenges such as low electrification rates and low power supply reliability. Increased private sector involvement is considered a key element in addressing these challenges but are constrained due to economic weakness and investment risk perception. The GoM is enacting several reforms and measures to attract private investment, including a PPP Law, establishment of the Autoridade Reguladora de Energia (ARENE), and electricity law revisions. Despite progress, critical risks persist, including regulatory uncertainties, inadequate tariffs, high grid connection costs, and lack of standardized processes for Independent Power Producers (IPPs). GET FiT Mozambique is designed to specifically address these risks, thereby facilitating increased private sector participation and boost power production and electricity supply capacity.

Similar to the GET FiT programmes in Zambia and Uganda, the programme's toolbox includes several instruments to support the development of the energy sector in Mozambique. In the mini-grids component, there is also a Productive Use of energy promotion component, aimed to stimulate economic activity in the targeted areas.

For further information about GET FiT Mozambique, please visit https://www.getfit-moz.org.





# Outlook

Having secured financiers who have expressed interest in financing the 120 MW GET FiT solar PV projects, the GET FiT Secretariat looks forward to working towards achieving financial close in 2024 and subsequently paving the way for commercial operation date by 2026.

Against this backdrop, the focus for 2024 will be to capitalise on the progress made during 2023. Particular focus will be on ensuring that the successful bidders sign mandate letters and project agreements and that lenders commence due diligence. Some of the GET FiT Secretariat's activities will focus on providing support to the due diligence process, where required, to enable the achievement of financial close by 2024. In addition, the PIC's focus and efforts will also slowly be directed towards the SHP portfolio, including agreeing and finalising the revised timelines with key stakeholders for launching the tender and seeking opportunities to collaborate with other donors to increase the available grant funding for the SHP programme.

Focus during 2024 will also be on the implementation of the key initiatives related to the GIS platform as well as the Open Access Market Framework. A successful outcome of GET FiT Zambia has the potential to make Zambia more resilient in tackling the impact of climate change. With a portfolio geographically spread across the country and representing different generation technologies (Solar PV and Small Hydropower), the projects can contribute to reducing the negative impact of external shocks, such as the droughts experienced by the country and the Southern African region.

The clear ambition for GET FiT in 2024 is to come one step closer to the programme outcome target of diversifying the energy mix by bringing online 120 MW of Solar PV projects and improving framework conditions for private investments in on-grid renewable energies up to 20 MW. This will enable a foundation to be set for further development of the SHP portfolio of projects as well as future private sector projects in Zambia.



## The People at Work for GET FiT Zambia



The programme is mainly carried forward by the GET FiT Zambia Secretariat in Lusaka and the Zambian governmental institutions Department of Energy (DoE) and Office for Promoting Private Power Investment (OPPPI). The picture to the left shows representatives from the GET FiT Secretariat and the DoE. From left to right, back to front Agnelli Kafuwe (DoE), Dailesi Njobvu (GET FiT Secretariat), Judith Raphael (GET FiT Secretariat), Brian Siakweenda (DoE), Isaac Soko (DoE) and Allan Chivunda (DoE). Other representatives who are not in the picture include David Wamulume (DoE), Shuko Zyambo (OPPPI), Misheck Mubuyaeta (OPPPI) and David Phiri (OPPPI).

KfW, in close cooperation with the Zambian Ministry of Energy, is responsible for the implementation of GET FiT Zambia, supported by Multiconsult as Programme Implementation Consultant:



Marco Freitag KfW Principal Project Manager



Arnold Simwaba Department of Energy Director



Judith Raphael Multiconsult Resident Director



Mari Sofie Brelin Furu Multiconsult Project Manager

#### GET FiT Zambia Annual Update 2023

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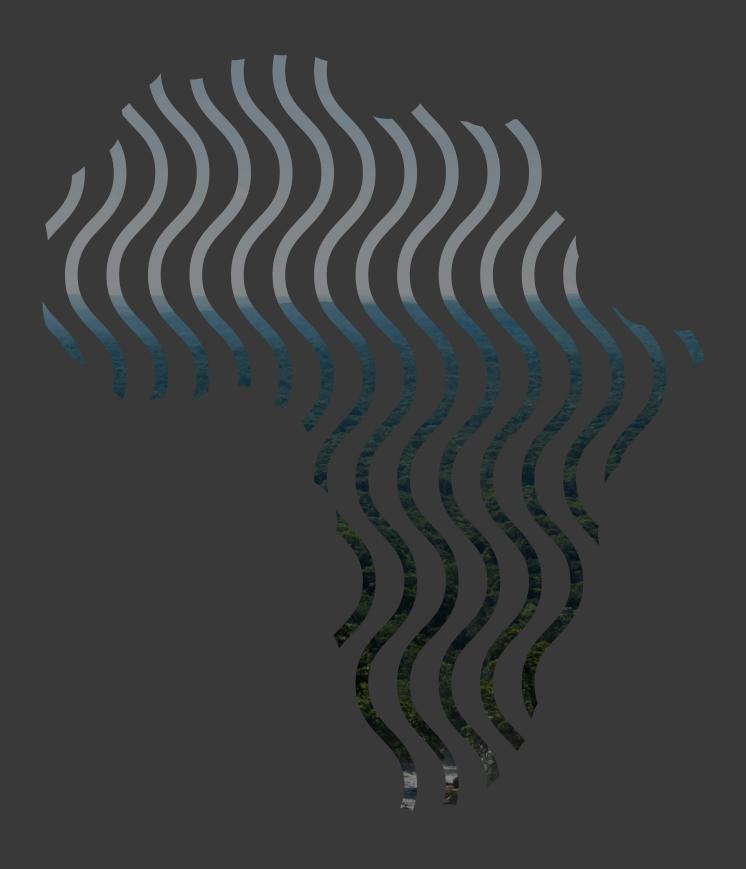
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