



Issue 62

Engineering

A publication of the Engineering Institution of Zambia

echo

Lead Story

Construction of The Northern Region Offices Commence

Page 1

Inside this issue

Consult Engineers When Procuring Equipment

Page 9

Up-Close with The EIZ President, Eng. Abel Ng'andu

Page 10

Donovan Community School Receives 30 Desks

Page 14



On the cover

A ground breaking ceremony to flag-off the construction of the Northern Region Offices and mark the momentous milestone was held at 8 Kantanta Street in Kitwe on 20th October 2022.

The Editorial Team

Editor Eng. Prof. John Siame, Eng. Grain Munakampe

Sub -Editor and Writer Ntalasha Yulu

Writer Abigail Hampande

Layout and Graphic Designer

didasteetz@gmail.com

Contributors

Lazarous Cheweut,

The Engineering Echo

Stand No 2374, Danny Pule Road, Showgrounds, Lusaka, Zambia.

Tel: +(260) 211 255 161

email: eiz@eiz.org.zm

Web: www.eiz.org.zm

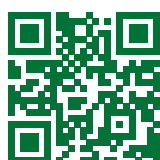
Disclaimer

The Publisher, Contributors, Editor, Editorial committee and related parties disclaim all liability and responsibility to any person or party be they a reader or consumer of this newsletter or not regarding the consequences and outcomes of anything done or omitted to be done in reliance whether partly or solely on the contents of this newsletter.

© 2023 EIZ Publication

Inside this issue

- 3 Message from the Editor
- 4 Foreword from the Registrar and Chief Executive Officer
- 6 Construction of The Northern Region Offices Commence
- 7 Join the Engineering Profession, Milupi Urges Youths
- 8 EIZ Celebrates the Africa Engineering Week
- 9 International Engineering Alliance, a Game-Changer for Zambia
- 10 Up-Close with The Engineering Institution of Zambia President, Eng. Abel Ng'andu
- 13 EIZ Assures of Continued Support in Quality Control
- 14 Donovan Community School Receives 30 Desks
- 15 EIZ, Kafue Gorge Training Centre Launch a Certified Energy Auditor Training
- 16 EIZ Sponsors The 2022 National Jets Fair
- 20 Engineering Mentors
- 22 Our new recruits



Would you prefer to receive this newsletter by email? Opt out of receiving hard copies by contacting us at eiz@eiz.org.zm

Or by scanning the QR Code

Message from the Editor



Eng. Prof. John Siame

Dear Reader,

It's hard to believe that the year 2022 has come to an end and is almost gone. It seems like only yesterday that we were still in the hot days of the hot season. The editorial team at Engineering Echo cannot believe it either! We would like to express our sincere gratitude for the support of our authors, reviewers, and readers throughout 2022: YOU ensured the Engineering Echo's success this year.

In the last quarter of the year 2022, Engineering Institution of Zambia (EIZ) undertook various activities and some of them are highlighted below:

- The flagging-off of the construction of a modern structure for the Northern Region Offices at 8 Kantanta Street in Kitwe on 20th October 2022.
- The exponential increment of membership of EIZ over the years; from about 6,000 in 2012 to 65,000 in 2022.
- EIZ and Kafue Gorge Regional Training Centre (KGRTC) launched a Certified Energy Auditor Training programme designed to build local capacity and promote skills transfer in the field of renewable energy and energy efficiency, on the 30th of May 2022.
- Donovan Community School in Kalulushi, received 30 desks as a donation from the EIZ on 20th October 2022.
- EIZ has partnered with the Engineering Council of South Africa (ECSA) in its mission to subscribe to the International Engineering Alliance (IEA).
- EIZ sponsored the 2022 National Jets Fair.

As the Editorial of Engineering Echo, we would also like to say thanks:

As 2022 comes to an end, it is our great pleasure to thank all of the friends of Engineering Echo: our authors, readers, and reviewers. Many thanks to the dedicated members of the Editorial Team. 2022 was a year full of challenges

for all of us, but throughout all these hardships the Engineering Echo continued to be published on time. Thanks to your continued support. On behalf of the Editorial Team, I would like to express our sincere gratitude and to wish all of you the best in 2023.

We wish a prosperous and happy 2023. We look forward to working with you in 2023. Have a pleasant reading!

Eng. Prof. John Siame

Chairperson of the EIZ publications and Editorial Committee

The Editorial Team



Eng. Grain Munakampe
Editor - Secretary of the
Publications and Editorial
Committee



Ntalasha Yulu
Sub-Editor and Writer - Public
Relations and Marketing
Manager



Abigail Hampande
Writer - Communications
Assistant

Foreword from the Registrar and Chief Executive Officer



Eng. David Kamungu

Dear Reader,

The recent months have seen a lot of activities, changes and innovations at the Engineering Institution of Zambia. This is in our effort to meet the needs of our countrywide spread members and stakeholders.

As an institution, we are always on a path of continuous improvement, through the use of emerging process tools; systems and strategies, so that we offer a premium service to our esteemed stakeholders.

Whilst some members are still yet to understand our mandate and appreciate the benefits; we have realized that regardless of our position, we need to exhibit the best attitude and skill, and continue increasing our value.

It is therefore of paramount importance that we do not depart from our mission statement in order for us to exceed the expectations of our members and other stakeholders.

Our existence as an institution has been justified through our mission, and this can only be achieved through a compact, motivated and dedicated workforce with a common purpose.

Efficiency and effectiveness can therefore only be realized if we utilize our available resources and management systems designed to support the achievement of the institutional goals and objectives.

In line with the 8th national Development plan, we have reviewed our Corporate Strategic Plan which comes into effect in 2023 to 2026 and have incorporated new objectives that

will turn around the institution and improve service delivery.

I am delighted to mention that in a bid to increase our quality of service, we have rolled out a new Database Management and Information system aimed at improving service delivery and managing member information. Further, in the third quarter of 2022, we reduced licence processing time from 30 days to 14 days. Our call is that all members create accounts and subscribe online through our website.

Our renewal processes are now seamless such that members obtain their licences within 10 minutes of making payments.

we have commenced the remodelling of the Northern Region offices in Kitwe, so that we can provide a decent and proper environment as we interact with our members and stakeholders.

The Northern Region offices cover activities in the Luapula, Muchinga, Copperbelt, Northern and North Western Provinces, and 60 percent of the members come from these areas.

In this regard, the offices were designed taking into account employees and the diversity of the members, their need for convenience, comfort, communication and interaction.

The first week of November saw us commemorating the 8th Africa Engineering Week which was held under the theme *“Accelerating the infrastructure development in Africa together”*.

The Africa Engineering Week was initiated to increase the visibility of engineering and its role in sustainable development in Africa. EIZ carried out several activities which included Exhibitions, Motivational Talks, Technical Lectures and Panel discussion fora, amongst others.

It was gratifying to see different member classes and stakeholders across the country participating in the above activities that were lined up in commemoration of this important annual event.

I am positive that next year’s event will even be more engaging and more encompassing so that every member will be part of an activity, not only to interact and learn, but to also stimulate the interests of the young people to join the profession.

In just a few weeks, we are ending the year, and I would like to remind our esteemed members that the renewals for the 2023 Membership subscription and practicing licenses commenced on 1st October 2022 and will end on 31st December 2022.

We are therefore encouraging all our members to renew their membership certificates and practicing licences before the year ends, to avoid being inconvenienced in the new year. The full benefit of renewing before 31st December is Insurance against death and permanent disability.

As EIZ, we believe no one has a monopoly on good ideas, and, in order to grow professionally, we will work with anyone who has constructive proposals for improved performance.

I therefore appeal to you all, our much-valued stakeholders to give us feedback, provide advice through the established channels and above all, support us in our quest to to be a World Class engineering body that fosters best engineering practice and technological innovation. Very soon we will introduce a toll free line for members to reach out.

Have a great reading!

Eng. David Kamungu



“As an institution, we are always on a path of continuous improvement, through the use of emerging process tools; systems and strategies, so that we offer a premium service to our esteemed stakeholders.”

Construction of The Northern Region Offices Commence



“It has therefore become imperative that we increase our quality of service by providing an environment that will meet the demands of our members in many significant ways.

Eng. Abel Ng'andu
EIZ President

The construction of the long-awaited Engineering Institution of Zambia (EIZ) Northern Region Offices in Kitwe has commenced.

A ground breaking ceremony to flag-off the construction of the modern structure and mark the momentous milestone was held at 8 Kantanta Street in Kitwe on 20th October 2022.

The Northern Regional office covers EIZ activities in the Luapula, Muchinga, Copper belt, Northern and North Western Provinces serving about 60 percent of the members.

Speaking at the event, EIZ President, Eng. Abel Ng'andu said the membership of the Institution has grown exponentially over the years; from about 6,000 in 2012 to 65,000 in 2022.

“It has therefore become imperative that we increase our quality of service by providing an environment that will meet the demands of our members in many significant ways. And one of these ways is to construct a befitting modern structure that will carry our brand and image to reflect positively on who we are and what we stand for,” Eng. Ng'andu said.

He said a new comfortable office environment will allow the Institution to live the brand and promote it during face-to-face member interactions.

He added that the construction of the building would, therefore, be a visible and viable asset, which will be utilised to build and grow the membership.

Eng. Ng'andu further said the offices were designed with both the employees, members and other stakeholders in mind, taking into account their diversity and their need for convenience, comfort, communication and interaction.

“This upcoming structure, is not just an ordinary building for us, but a symbol of our commitment to re-shaping the profession that will stand the test of time in playing a crucial role in the economic development of this country,” he said.

And EIZ Northern Region Chairperson Eng. Chansa Musonda said there was more work to be done to bridge the membership aspirations with how they perceive the Institution.

“Sticking to the mandate of the Institution is safe, however the framers of our constitution had a vision for their time, and time has long moved on. We need to respond to the growing concerns of the members to take active steps to address these concerns,” Eng. Musonda said.

“We need to make the hard decisions, Mr. president, to address the members' cry in an environment that is hostile to engineers; where engineers are losing jobs, where engineers are blamed for all things that go wrong yet decisions are made elsewhere”.

He said the Institution needs to aspire for greater heights and realise the giant that it is, to help push the nation forward.





Join the Engineering Profession, Milupi Urges Youths

Youths have been urged to take up the engineering profession so that they can contribute to solving societal problems and improving the quality of life for all Zambians.

And government has pledged to support the Engineering Institution of Zambia (EIZ) as a respected and reliable source of advice and guidance on strategies and policies that use engineering and technology for the benefit of human development and wellbeing.

Minister of Infrastructure, Housing and National Development Eng. Charles Milupi encouraged young people to absorb science, mathematics and engineering at all levels so that the sector can grow.

Eng. Milupi was addressing the nation on the eve of the 8th Africa Engineering Week on 6th November, 2022.

He said for continuity in the profession, there was need for experienced

Engineering Professionals to mentor those that are joining the field so that they excel in their performance.

"I am therefore very pleased that the EIZ has been taking an active and consistent lead role in promoting the Engineering Profession in Zambia and stimulating the interests of the young people to take up engineering," Eng. Milupi said.

He said there would be no meaningful economic growth without engineering input; which explains why engineering has a proportional relationship with development.

"That is why it is imperative that in planning for national development, the role of the engineering professionals is prioritised," he added.

He further said, "I urged the professionals to use their skills and play a pivotal role to support the rebuilding of the economy while shaping the future of the societies we live in."

He urged members of the public and various organisations to provide the necessary encouragement, support and opportunities for engineering professionals so that together we move forward on our journey to prosperity.

The Engineering Institution of Zambia (EIZ) joined the rest of Africa to commemorate the Africa Engineering Week which was held from 7th to 11th November 2022, under the theme, *"Accelerating the infrastructure development in Africa together"*.

The aim was to encourage students to study engineering by following science, technology, engineering and mathematics (STEM) curriculum with practical engineering applications, and to incite more African countries to participate and ensuring the sustainability in these efforts.



EIZ Celebrates the Africa Engineering Week

The Engineering Institution of Zambia (EIZ) joined the rest of Africa to commemorate the Africa Engineering Week which was held from 7th to 11th November 2022, under the theme, "Accelerating the infrastructure development in Africa together".

The Africa Engineering Week was initiated by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in collaboration with the Federation of African Engineering Organisations (FAEO) and the World Federation of Engineering Organisations (WFEO).

The aim of this initiative was to increase the visibility of engineering and its role in sustainable development in Africa and to encourage students to study engineering by supplementing science, technology, engineering and mathematics (STEM) curriculum with practical engineering applications, and to incite more African countries to participate.

EIZ lined up several activities to promote the engineering profession and stimulate the interests of the young people to take it up.

Some of the activities included: Engineering exhibitions, motivational talks, technical lectures, career talks in schools, technical tours, panel discussion programmes, public forums and various media platforms.

The EIZ team also used these platforms to explain all engineering related issues to the general public, respond to numerous questions as well as exhibit the functions of the Institution and the benefits that come with being part of it as a member.



Career talks in schools



EIZ immediate past President Eng. Eugene Haazele speaks to a pupil Exhibitor at the National Science Fair

Consult Engineers When Procuring Equipment

Procurement officials have been advised to consult and involve engineering professionals during purchasing of equipment.

And Engineering Institution of Zambia (EIZ) President Eng. Abel N'gandu called on the Procurement and Supply sector to exhibit the highest principles of good practice, zero

tolerance to corruption and execute professionalism at every level.

Eng. Ng'andu was speaking at the Zambia Institute of Purchasing and Supply (ZIPS) annual conference which was held in Livingstone on 5th October 2022.

The EIZ President said government has placed high demand on

professionalism in the execution of various projects which greatly lies in the hands of procurement.

He said procurement needs to take a proactive approach to ensure that professionalism is exhibited at the highest level before, during and after purchasing and supplying of equipment, to ensure that the right specifications and type of materials are procured.

Eng. Ng'andu added that "As a professional, there is need to follow the right procurement stages in order to manage the procurement cost, time and quality, and this applies to all sectors including engineering".



**INTERNATIONAL
ENGINEERING
ALLIANCE**

...a Game-Changer for Zambia

The Engineering Institution of Zambia (EIZ) has partnered with the Engineering Council of South Africa (ECSA) in its mission to subscribe to the International Engineering Alliance (IEA).

The subscription to the IEA will enable engineering professionals to practice across the globe, as well as improve the quality of engineering education and enhance the levels of competence of engineering professionals.

This is going to be a game-changer for Zambia because once Zambia is accredited to the IEA, Engineering Professionals will not be subjected to re-evaluation to determine their

competence to practice anywhere in the world.

IEA is a global not-for-profit organisation, which comprises members from 41 jurisdictions within 29 countries, involving seven international agreements. These international agreements govern the recognition of engineering education qualifications and professional competence.

There are three Educational Accords which cover the whole spectrum of engineering; Washington Accord for engineers, Sydney Accord for

technologists and the Dublin Accord for technicians and crafts persons.

Through the Educational Accords and Competence Agreements members of the International Engineering Alliance establish and enforce internationally bench-marked standards for engineering education and expected competence for engineering practice.

EIZ is seeking full signatory status to the three accords. The Institution is currently in its initial stages of mentorship with Engineering Council of South Africa (ECSA).

The Institution will pursue signatory status to the Washington Accord in the first phase and follow through with Dublin and Sydney Accords in the second phase. According to the Mentor, this would ensure a shortened period of membership application process to the Alliance.

In a few years, once this is achieved, engineering in Zambia will rise to an international level of standard practice, assuring better output of works around the country.

Up-Close with The Engineering Institution of Zambia President, Eng. Abel Ng'andu



In this edition of the Engineering Echo, Engineering institution of Zambia (EIZ) Public Relations Manager Ntalasha Yulu gets up-close with the President of the Institution, Eng. Abel Ng'andu as he talks about what the institution is striving to accomplish for its members. Eng. Ng'andu also talks about how EIZ can increase collaboration with the government to increase its role in infrastructural development. The last part of the interview addresses membership concerns and some of the challenges the institution is facing.



Ntalasha: You have been in office for over two (2) years now, after being re-elected for the second term as EIZ President, how has been the journey so far?

Abel: First of all, I was delighted after being re-elected for the second term. I am very thankful

to the members for the opportunity. I feel very privileged for being the President of such a great institution. Honestly, it's been an honor, I have enjoyed being part of both the 60th and the 61st Councils. In these two years as President, I have learnt the art of compromise, allow diverse views and work with everyone; whether they voted for me or not. The journey has been very fulfilling. I think I have become a better leader too. We have a lot of work to do as EIZ to make the institution great for our members. And I can say, there's light at the end of the tunnel.

Ntalasha: As President, what are some of the things you are striving to accomplish for the members under your tenure?

Abel: The first thing we are working on, is improving service delivery and operational efficiency. We have made strides towards membership renewals. We have automated our internal processes of registration, renewals and upgrades through the implementation of the Data Management Information System (DMIS). The system is functional and it is still being updated to make it more efficient. We are almost concluding the implementation of the Quality Management System (QMS), and we want it to be ISO certified. We are actively pursuing accreditation to the International Engineering Alliance (IEA). The IEA will enable our members to practice across the globe without being re-evaluated. This will also improve the quality of engineering education and enhance the levels of competence for the engineering professionals. We are further increasing non-traditional income for the institution. We are happy that already, tenants have coming into our new Headquarter building. Most importantly, we are continually looking for new ways to increase the value of the institution for our members.

Ntalasha: How would you want the Government to collaborate with EIZ so that the institution can offer a premium service in terms of planning and decision-making for engineering-related issues and infrastructure development.

Abel: We are already working in collaboration with the government. But going forward, we want government to utilize more, the expertise that engineers have in solving societal problems. We will be happy to see all government engineering companies being headed by Engineers. We want to be involved in all engineering related projects before they commence, so that shoddy works are avoided in future. Engineering projects that are under the Constituency Development Fund (CDF), should be supervised by registered engineering professionals with the proper

expertise; that's how government will get value for its money. Furthermore, I would like to advise that Procurement officers buying engineering materials and equipment should have an engineering background so that they understand the technicalities of what is being quoted.

Ntalasha: People have bemoaned the poor quality of works and the exorbitant prices associated with Engineering projects, such as roads, drainages. What is your comment on this as EIZ? Furthermore, what determines the price of a road per kilometer.

Abel: As EIZ, we don't condone shoddy works and as a result, we have taken measures to hold contractors accountable through Disciplinary Actions.

And, there are so many factors that determine the prices of road construction. Whether the road is under maintenance, under rehabilitation or a greenfield. Obviously, the price per kilometer will vary. The other factor is the alignment of the road. For instance, if the road passes through a mountain, or river, or rocky place; or if it's a tunnel. All that defines the price.

Ntalasha: The current government has a strong view on Public Private Partnerships (PPPs) in terms of fostering national development. What is the role of EIZ in ensuring that engineering professionals contribute to this vision?

Abel: I would like to commend the government for introducing PPPs. As EIZ, we are ensuring that engineering professionals contribute to this vision significantly by strengthening monitoring of engineering works among local contractors to ensure adherence to required standards.

Ntalasha: Some people seem not to understand the full benefits of being a member, would you please explain why it is important for engineering professionals to be registered by EIZ and what benefits they will have?

Abel: Regulating engineering works is very critical. Otherwise, there could be a catastrophe in this country. It is important to recognise that in every prudent undertaking, there has to be order in the way matters are addressed.

Similarly, it is important to have a mouth piece that would voice out all concerns of any engineering professional. Having EIZ positioned to represent Engineering professionals provides great advantage in representing the interests of all engineering professionals in the Country.

Besides this fundamental prerequisite, the Institution has endeavored to put up a number of benefits for its members:



Ntalasha: Where do u see EIZ in the next 5 years?

Abel: At the center of pushing towards the franchise of innovation. I see EIZ building innovation centers like Tech-hubs where young people can learn and continually develop themselves. In about 5 years, EIZ will be accredited to the IEA and this means that the institution would have raised its quality of engineering education and enhance the levels of competence of engineering professionals. It will also be ISO certified.

Ntalasha: As a successful engineer and businessman, how would you inspire upcoming engineering professionals who would want to step in your shoes and more?

Abel: Be ambitious. Getting a white-collar job is not the only avenue. Be entrepreneurs and realise big dreams. Never fear to fail, because failure is part of the process. Personally, I have failed many times; but what is important is to pick up pieces and try again. Above all, always strive to do the right thing; no compromise, no corruption, and you will create a good business reputation for yourself.

Ntalasha: What is that one thing you would want to be remembered for as EIZ President

Abel: So hard to mention just one. Many significant strides have been made under my tenure. We raised the institutional profile by amending the Constitution. We submitted the Charge-out rates to the Ministry of Infrastructure, Housing and Urban Development. We expect the Ministry to operationalize soon. This is really long overdue. I am happy to mention that we accelerated the works at the EIZ Headquarters to complete the building. And now we have commenced the construction of Northern Region Offices in Kitwe. Around June, July this year, there was a storm that led to the Council to take disciplinary action against some erring members. We provided leadership and weathered the storm. We introduced the Quality Management System (QMS) to improve operational efficiency. We are also pushing to be ISO certified.

Ntalasha: People know you as an Engineer and Businessman. Is there anything else you would want them to know about you that is not in the public domain?

Abel: I have been in the Corporate World. I am proud to mention that I was once Board Chairman for United Bank for Africa (UBA) from 2017 to 2020, Vice Board Chairman for the National Construction Centre (NCC). I have also sat on the Energy Regulation Board (ERB) and Zambia Railways Board.

I love to read. Am a book worm. When am not working, am learning new things. Some of my favorite books include, The Power of Habit by Charles Duhigg, Think and Grow Rich (Original 1937) by Napoleon Hill. This is the single best-selling personal success book of all times. It is a "Must Read". The Art of Strategy by R.L. Wing and the 7 habits of highly effective people, among so many I have read.

Ntalasha: What are some of the Challenges you have faced during your tenure?

Abel: The major ones include non-compliance, forgeries. We don't have the capacity to reach all corners of the Country. We don't have support from some procuring entities who engage non-registered Contractors. And lack of support from employers who employ non-registered engineering professionals.

Ntalasha: Finally, what is your message to the members and other stakeholders?

Abel: We are striving to be a world class institution and, in our pursuit, to align our vision and efforts with those of government we need all the members support and together we will be victors and posterity will be happy with us.

To our members we urge you to read and understand the mandate of EIZ so that you appreciate the benefits. And most importantly remind our members to be compliant so that so that we maintain the confidence of clients and consequently better output of engineering works. Take advantage of the SI once its approved.

To government, we request for a seat on the decision-making table on all infrastructural and engineering projects before conception so that we can contribute effectively and minimize shoddy works.

We urge members of the public to ensure that those they engage to carry out engineering works are compliant to avoid poor works. Be vigilante and report any suspected acts of fraud to the institution. Before year end, we are putting up a Call Centre to make it easier for stakeholders to interact with us.

EIZ Assures of Continued Support in Quality Control



Eng. Hon. Milupi



Members following proceedings during the Built environment Indaba



“the Built Environment is one of the largest in the Industrial sector; contributing about 27.5 percent of the Gross Domestic Product GDP to the country.”

Eng. Charles Milupi
Minister of Infrastructure, Housing and Urban Development

EIZ participated in the 2022 Built Environment Indaba held under the theme bridging the Gap for Inclusive Growth.

The aim of the Built Environment Indaba is to identify and address the most pertinent questions, practices, methods, and modes of research and development that can inform the urgently needed transformation of the Zambian construction industry to enable a sustainable, equitable, and inclusive future for all.

Minister of Infrastructure, Housing and Urban Development, Eng. Charles Milupi who officially opened the event said the Built Environment is one of the largest in the Industrial sector; contributing about 27.5 percent of the Gross Domestic Product GDP to the country.

Hon. Milupi said the government is seriously implementing the decentralisation agenda in order to foster development at a local level, and is therefore calling for stakeholders to actively support integrated development planning and project execution at the Ward, Constituency and District levels.

He said the Government is empowering local contractors, including youth and women led contractors, in the implementation of the Constituency Development Fund (CDF) projects, to support local businesses.

He further called on professional Architects, Engineers and contractors to find ways of building capacities of local contractors in Kaputa or Shangombo in order for them to maximize the opportunities created by the increased CDF.

And EIZ President Eng. Abel Ng'andu assured government of continued support by ensuring quality control in the infrastructure sector.

Eng. Ng'andu stressed the need for professionalism to be exhibited by all members in the Built environment.

The president also informed the meeting that EIZ had renewed its partnership with the Engineering Council of South Africa (ECSA) to mentor the institution into the Sydney, Washington and Dublin accords.

Donovan Community School Receives 30 Desks



Pupils singing a thanksgiving song

Donovan community school in Kalulushi, received 30 desks as a donation from the Engineering Institution of Zambia (EIZ) on 20th October 2022.

EIZ Vice President for Policy, Public Relations and National Development (PPRND) Eng. Kennedy Musonda who officially handed over the desks said the Institution has recognised that quality learning requires a safe and friendly environment with appropriate facilities and infrastructure.

"We realise that pupils need guidance, good infrastructure and learning materials and hence the initiative by us to come up with this donation," Eng. Musonda said.

He said the Institution has since pledged to intervene subsequently through collaboration

with well-meaning individuals, organisations and government to improve the learning experience for children.

"With every desk, the institution is helping to keep children in school by increasing attendance as well as high participation in class activities", he added. "The Institution believes that the desks will have a positive effect, not only in the children's education but also on their well-being and provide comfort and make the children more alert and attentive in class"

Eng. Musonda has since urged other corporations to support schools wherever they notice a need and not leave it to government alone.

"As an Institution we applaud government for introducing free education, this in itself is statement enough of their will to drive an educated citizenry and with our collective efforts, we will improve the quality of lives for many people in the societies we live in," he said.

And Donovan school Head teacher Mr. Yona Zulu expressed gratitude to the Institution for the gesture and outlined the many areas where the school still has critical needs.

"We realise that pupils need guidance, good infrastructure and learning materials and hence the initiative by us to come up with this donation,"

Eng. Kennedy Musonda

EIZ Vice President for Policy, Public Relations and National Development (PPRND)



EIZ Registrar/Chief Executive Officer Eng. David Kamungu converses with one of the pupils

EIZ, Kafue Gorge Training Centre Launch a Certified Energy Auditor Training



EIZ members with invited delegates during the Training



Members during the training



Members pose for a picture at the Graduation ceremony

The Engineering Institution of Zambia (EIZ) in collaboration with Kafue Gorge Training Centre (KGRTC) launched a Certified Energy Auditor Training designed to build local capacity and promote skill transfer in the field of renewable energy and energy efficiency, on the 30th of May 202.

During the event, which was held at KGRTC, Ministry of Energy Assistant Director Mr. Mafayo Ziba said the launch of the training was a clear demonstration of government to resolve and promote renewable energy efficiency across all sectors of the economy as well as to increase access to clean and modern energy services for social economic development.

"We understand that in the past, the country has trained some energy auditors. However, this number has been non eligible to record any significant impact," he said.

The Ministry of Energy through the Increased Access to Electricity and Renewable Energy Production

(IAEREP) project designed this training programme in order to build local capacity and promote skills transfer in the field of renewable energy and energy efficiency," he added.

He said a total of one million Kwacha targeting at least 40 participants from the field of engineering and other disciplines has been allocated towards the programme.

Mr. Ziba thanked the IAEREP and the European Union for their support for this training and also thanked all the participants for expressing interest in the programme.

And EIZ Vice President for Membership and Continuous Professional Development (MCPD), Eng. Sharon Musonda said the Institution was extremely pleased to be supported by the European Union, through the increased access to Electricity and Renewable Energy Production project for Zambia on the assignment.

Eng. Musonda said the training would help the energy practitioners, who already have a good knowledge base in energy engineering subjects, to become the energy-auditing professionals and duly recognised by the Engineering Institution of Zambia.

Eng. Musonda said learning is a continuous and ongoing process therefore the need to keep learning new skills and acquire new knowledge in order to live and work more productively and effectively.

Some of the topics under this training included: Energy Consumption, Data Collection and Analysis, Introduction to Energy Management and Audits, Electrical Metering and Tariffs, Industrial and Commercial Facilities Equipment and Energy Saving Opportunities.

EIZ Sponsors the 2022 National Jets Fair

As one of the functions of EIZ is to promote the general advancement of science, engineering and technology for the improvement of quality of life, EIZ sponsored the 2022 National Jets Fair which was held from the 8th to 12th August 2022.

The Fair was held at the National Science Centre under the theme, "Promoting innovation and entrepreneurship through skills transfer and digital literacy: towards value addition, job creation and linkages with industry and community".

Minister of Education Hon. Douglas Syakalima graced this occasion and further commissioned the Science, Technology, Engineering and Mathematics (STEM) centre, on behalf of the Republican President, Mr. Hakainde Hichilema.

In a speech read on his behalf by Hon. Syakalima, the President said the Ministry of Education was tasked to commence the implementation of STEM education as a gateway to Zambia's economic transformation.

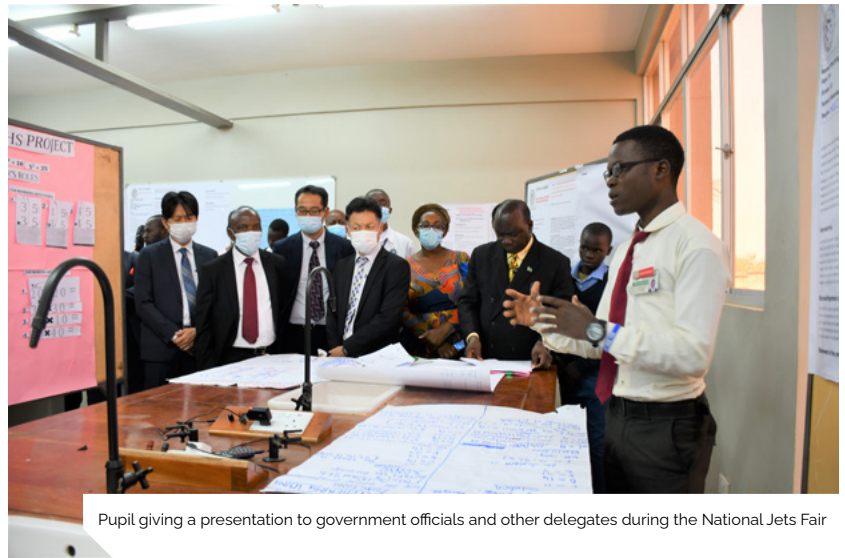
"The National Science Centre will contribute to the country's objectives to increase and facilitate innovation and entrepreneurship among learners from early childhood, through college and university as well as STEM educators, teachers and researchers within and outside Zambia," he said.

The President directed the Ministry of Education to implement STEM by the end of 2023, and enhance science, technology, innovation and research which will ultimately lead to productivity for both national and international demands.

Mr. Hichilema further urged other stakeholders to join hands with the government in supporting the development of appropriate human capital for the country's national development.

Speaking at the same event, Director National Science Centre Dr. Benson Banda said the 2022 National Jets Fair attracted a total of 598 participants from 11 Regions from 10 provinces, with Southern having two regions.

"The center managed to actively participate in the interpretation of government's aspirations through production and installation of learner-centered workbenches in science laboratories, production



Pupil giving a presentation to government officials and other delegates during the National Jets Fair



Pupils from various STEM Schools showcasing their construction Skills during the National Science Fair

of cost-effective teaching and learning materials desks and conducting teacher training through programmes dubbed: *Knowledge Co-Creation Programme*," he said.

"Zambia is being driven by the 8th National Developmental Plan (8NDP) whose focus is economic transformation and job creation. And to achieve these aspirations, one of the aspects is to make the young generation engage in productivity that enhances skills and a culture of value addition," Mr. Banda said.



ARE YOU COVERED?

RENEW YOUR MEMBERSHIP SUBSCRIPTION AND PRACTICING LICENCES BY 31ST DECEMBER 2023, TO BE COVERED FOR FUNERAL INSURANCE

Engineers, Technologists, Technicians, Crafts persons, Skilled people, Organizations and Units are entitled to funeral insurance if they pay before the deadline of each preceding year.

All payments to be made directly through _____

Indo Zambia Bank, Lusaka Main Branch
0012030002117
09001
INZAZMLX

Standard Chartered Bank Zambia PLC, Zambia Way Branch
0100140059600
060017
SCBLZMLX

Stanbic Bank, Mulungushi Branch
9130000711083
040015

Zambia National Commercial Bank, Industrial Branch Kitwe
0104882000233 (Cash payment only)
0104882400155 (Cheque payment only)

AIRTEL MONEY

Dial *115#
Select option 4 (Make Payment)
Select option 5 (Goods & Services)
Select Option 1 (Enter Merchant Code)
Enter Business Name (EIZ)
Enter Amount (Eg. K250)
Enter Reference (Eg. Tom Banda, Technologist)
Enter PIN (Your Mobile Money PIN)

MTN MONEY

Dial *115#
Enter the Merchant Code (739859)
Enter Amount (Eg. K250)
Enter Reference (Eg. Tom Sitali, Technologist)
Enter PIN (Your Mobile Money PIN)
Enter PIN (Your Mobile Money PIN)

Visit www.eiz.org.zm for more information or contact 0960373849



Photo Focus



Student showcasing her science project.



L- EIZ member visiting the EIZ stand at the 2022 Agric and Comm Show.
R- EIZ IT Manager, Clowder Samahongo.



L-Vice President Membership and Continuous Professional Development Eng. Sharon Musonda at the EIZ stand during the Agricultural and Commercial Show 2022



Members during the Built Environment Indaba cocktail at EIZ Headquarters



EIZ Council and Secretariat during the Agricultural and Commercial Show 2022



Pupil exhibiting a project at the National Science Fair 2022



Members during a Technical Tour at Bangweulu Solar Plant.



L-Chairperson Crafts & Technicians Section Cra. Simwanda with Donovan school representatives (m) look on as PPRND Vice President Eng. Kennedy Musonda cuts the ribbon during the Handover ceremony of desks



L-R Eng. RB Chairperson Eng. Stephen Kabaso, Deputy Inspector General of Police-Administration, Mrs. Doris Chibombe of Policy, EIZ Deputy Registrar Eng. Kabwe Musonda during a Courtesy Call to Police Headquarters



Engineering Mentors

“Learning from the great captains of our industry”

By Lazarous Cheweut

We strive as young Engineers with great passion and inspiration to one day carry the mantle from the captains of our industry in the country. Mentors are some of the greatest things we must consider, among them include the likes of Eng. Abel Ng'andu who is currently our Engineering institution of Zambia (EIZ) President. He shares a common background like most of us; grew up in Chawama, Lusaka and studied Civil Engineering in India with great passion and has deep interest in making EIZ World class.

We have Professor Dr. Clive Chirwa our very own World acclaimed Engineer, Chair of Automotive & Aerospace Structure and Head of Bolton Automotive and Research Group who recently helped solve a landing sequencing glitch on the James Webb Telescope.

And Eng. Kabwe Musonda, a Chemical Engineer who happens to be Deputy Registrar and Director Operations, with vast experience in engineering projects under EIZ and keen interest in advancing the role of women in Engineering.

Keeping in mind that we must raise the flag of Mother Zambia higher, as we the next generation of Engineers,

who by default, are required to become more innovative, creative, uphold high problem-solving skills, high standards of engineering ethics and apply high mathematical and analytical abilities as well as logical thinking for economical industrial development. As a result of high rising advanced global technology around the world, to compete favorably, “We must understand the importance of mentors.”

The immediate challenges most of us young engineers face include career identification, choosing an engineering major, career development while in industry, networking and skills development among many others. I strongly believe this can be overcome by choosing the right mentors in line with the area of interest and the knowledge needed at hand. However, I must make mention that this is a culture we must embrace as engineers as this will help remodel the Zambian engineering culture for the common purpose of development.

Engineering Mentors are people who support, advise and guide us; they make time to understand the challenges we are facing and use their understanding and personal experience to help us improve. Mentors have the potential to become our lifelong friends simply because mentoring is an act or a process of helping and guiding someone's personal development; seeing somebody grow and succeed as a



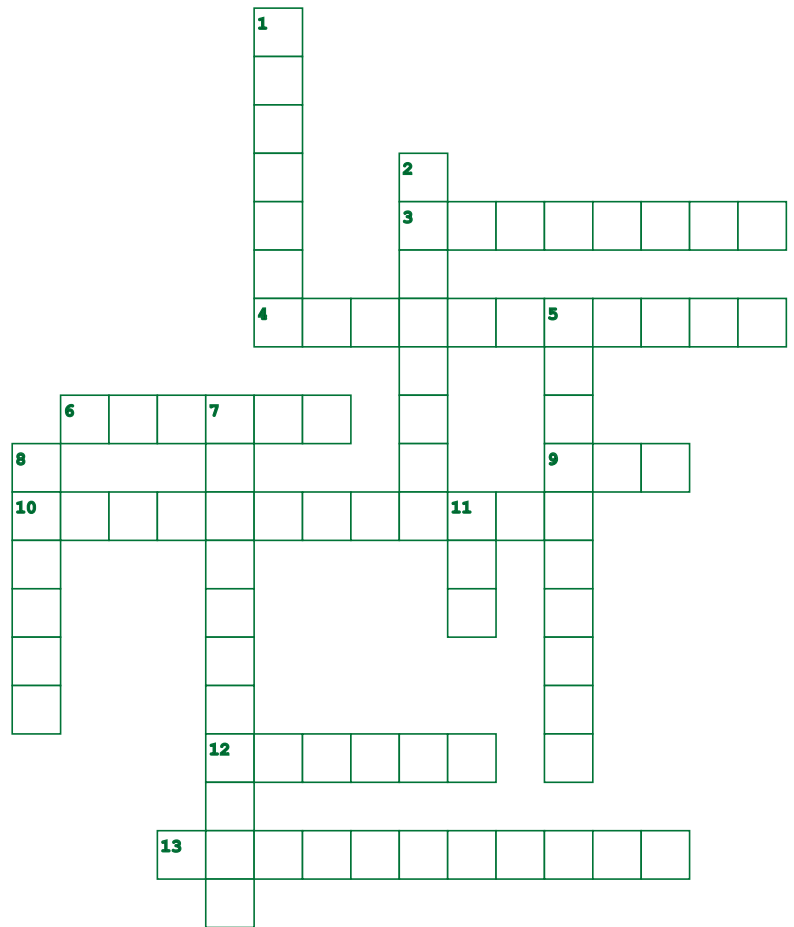
Crossword Puzzle

Across

- 3. One of the major functions of EIZ (8)
- 4. The first word in the E.I.Z acronym. (11)
- 6. Registered by EIZ (6)
- 9. A member obtains these points for frequently attending training and meetings (Acronym) (3)
- 10. An Engineering Professional (12)
- 12. A machine that converts power into motion (6)
- 13. EIZ offers this to support Engineering students' education (11)

Down

- 1. A document obtained from EIZ to practice and carry out engineering works legally. (7)
- 2. The action of teaching a particular skill (8)
- 5. Type of Engineer (10)
- 7. The fund set up by EIZ to provide support and assistance
- 8. Moral principles that govern a person's behaviour. (6)
- 11. EIZ has applied to this organisation to enable Zambians have internationally recognised practicing licences. (Acronym) (3)



Send your answers to abigailhampande@eiz.org.zm. First 5 correct answers win a prize

You can now PAY your EIZ Membership Subscription fees using Airtel and MTN payment platforms as follows;

AIRTEL MONEY

- Dial *778#
- Select option 4 (Make Payment)
- Select option 5 (Goods & Services)
- Select Option 1 (Enter Merchant Code)
- Enter Business Name (EIZ)
- Enter Amount (Eg. K250)
- Enter Reference (Eg. Mercy Banda, Technologist)
- Enter PIN (Your Mobile Money PIN)

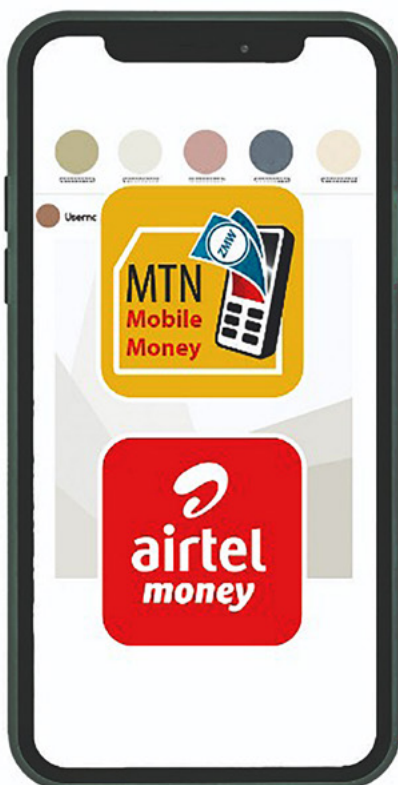
MTN MOMO PAY

For Northern Region Members

- Dial *303*5*1#
- Enter the Merchant Code (109943)
- Enter Amount (Eg. K250)
- Enter Reference (Eg. Mercy Banda, Technologist)
- Enter PIN (Your Mobile Money PIN)

For Southern Region Members

- Dial *303*5*1#
- Enter the Merchant Code (739859)
- Enter Amount (Eg. K250)
- Enter Reference (Eg. Mercy Banda, Technologist)
- Enter PIN (Your Mobile Money PIN)



Once payment is done, send proof of payment to

Northern Region Accounts - +260 763 689 465

Southern Region Accounts - +260 777 490 049



Our new recruits



Eng. Chimfwembe Mutale - Regional Manager – South

Eng. Chimfwembe Mutale holds a Bachelor's Degree in Electrical Engineering and a Master's Degree in Business Administration. She has 10 years of post-qualification experience in the energy, water and regulatory sector.

Before joining EIZ as a Compliance Inspector in the Southern Region, she served as a Segment Manager at Davis and Shirtliff Zambia where she embodied the company's theme of improving people's lives.

Eng. Chimfwembe is energetic and passionate about promoting engineering and STEM careers in young learners. Her philosophy is that of continuous improvement, commitment and excellence.



Eng. Muzamu Ezra Dokowe - Compliance Inspector (Northern Region)

Eng. Dokowe holds a Bachelor of Engineering in Civil and Environmental Engineering, and is currently pursuing a Master of Engineering Degree in Construction Management from the University of Zambia. He has over 10 years' experience in various roles in the construction sector working with both local and international organisations.

Prior to joining EIZ, Muzamu worked as Construction Manager/Resident Engineer for Henan Guoji Development Company Ltd in Ndola. He is an active academic researcher and passionate member of the EIZ desirous to grow the membership of the institution.



Ntalasha Yulu - Public Relations & Marketing Manager

Ms. Yulu is a seasoned Public Relations Practitioner and Journalist with over 15 years of experience in internal and external communication. She has worked for organizations such as ZESCO Limited, Road Transport and Safety Agency (RTSA), and the Post Newspaper. She is currently working on a book on Public Relations techniques for Corporate Organizations. Her focus is on increasing the brand, image and visibility of the EIZ while building mutual understanding between the institution and its stakeholders. Ms. Yulu holds a Master of Communication for Development and a Bachelor's degree from the University of Zambia, and has studied Journalism and Public Relations from Evelyn Hone College.



Eng. Edward Mbewe - Compliance Inspector (Southern Region)

Eng. Edward Mbewe is a Mining Engineer from the Copperbelt University with over 5 years experience in the mining sector. He has skills in Drill and Blast techniques and mine planning and design, ranging from short-, medium- and long-term planning. He has worked as a Blasting Engineer, Drill and Blast Engineer and previously as Production planning Engineer at Lubambe Copper mine. He is competent in mine planning and Drill & Blast design software and implementation. He is particular to details of Quality assurance Quality control (QAQC).

During his spare time, he enjoys playing and watching soccer.

Continued from front Page 20

result of one's help is an incredible and valuable experience that is highly rewarding for both mentor and the mentee. They identify more talent and ability within us than we do ourselves, and help bring it out.

There are a number of common misconceptions about mentoring: "A mentor must be similar to me" - It is better we seek out options from outside of our usual spheres of influence. Another misconception is that we think mentorship is 'time consuming.' However, mentorship can take many different forms. What is key is to commit time and set a clear agenda based on mutual trust and respect.

Choosing an engineering mentor is absolutely imperative for all engineers, enabling us to build confidence that leads to empowerment, creating a safe space to try new things, gaining insight from mentor, and seeking targeted help when we are stuck. This exponentially speeds up growth for engineers who are less experienced by helping them not to waste time fighting battles that are already won. It cultivates a growth mindset which is a good quality for every successful

engineer. We must understand that certain people have special talents, and intelligence varies from person to person. However, this can be developed and increased through hard work and those who are able to recognise this dynamic and leverage it to their advantage, have a growth mindset.

As Engineers we must develop the attitude to be mentored where necessary. Having technical mentors is critical for career success and advancement. Engineering technology evolves rapidly and as such, we must consider a good mentor as one with relevant expertise or knowledge, and has the enthusiasm for sharing that expertise, as well as the eagerness to invest time in us and give honest and direct feedback on every matter at hand.

The COVID-19 is among the many other reasons as to why all Zambian engineers must take keen interest in mentorship as there is a huge gap between the 2018 graduate engineers and the later graduates because of an unfavorable environment to produce the best industrious, innovative and creative engineers. This will transform the Zambian engineering culture and help to put us on the world map.



2023 SYMPOSIUM AND ANNUAL GENERAL MEETING

Theme

Sustainable Economic Transformation Through Home-grown engineering solutions

Avani Victoria Falls Resort | 20th – 22nd April 2023

EIZ will also be recognising exceptional individuals and organisations during the symposium, through the following categories of awards:

Outstanding Service Award, Engineering Excellence Award-Organisations, Most promising young Engineering Professional Award (Engineer, Technologist, Technician and Craftsperson), Most consistent sponsors Award and Outstanding Service Award -Posthumous

Register now on www.eiz.org.zm



Advertise your products with us



Maximize your reach through our platform's by advertising your products with us today to reach your intended audience in the Engineering field.

Advertise your products In the Engineering Institution of Zambia Platforms with a reach of approximately 65,000 engineering professionals.

The Engineering Echo Magazine is Zambia's leading Engineering magazine published quarterly. The publication serves as a vital and useful informative and entertaining resource for Engineering Professionals, organisations, business people and other stakeholders.

2023 Rate Card

Echo Magazine Prime Pages		Ordinary Pages		Other Tools of Advertising	
Cover page	K8,000.00	Half Pages	K3,000.00	Website/ Facebook page/ WhatsApp	K4,000.00
Front Inside	K6,000.00	Full Pages	K4,500.00	Text Messages (once)	K5,000.00
Back Page	K5,000.00	2 Full pages	K6,500.00	Emails (Twice in a week)	K4,000.00
Back Inside	K4,000.00			Marketing Slot during Forums	K5,000.00
Centre Spread	K8,000.00			Marketing slots during the AGM	K16,000.00

To advertise kindly contact our Communications Officer;

Cynthia Chiyabu Ngwengwe
Tel: +260 211 255161
Cell: 0960373849
Email: cynthia.chiyabu@eiz.org.com

Upcoming

2023 EVENTS

04
MARCH

World Engineering Day

18
MARCH

Southern Region Annual General Meeting

Mulungushi International Conference Centre, Lusaka | 18th March 2023

25
MARCH

Northern Region Annual General Meeting

Protea Hotel, Ndola | 25th March 2023

20
APRIL

Symposium and Annual General Meeting

Avani, Livingstone | 20th April – 22nd April 2023

20
APRIL

Zambia Women in Engineering Conference

Avani, Livingstone | 20th April 2023

FAQ

FREQUENTLY ASKED QUESTIONS



How do i register as a member of EIZ?

1. Visit www.eiz.org.zm
2. In the top right corner, click on APPLY ONLINE
3. On the new page, click on Create Account button
4. Fill in your details in the new form
5. Create a password for your account then submit the form
6. Go to your email box and check for an email from EIZ system to activate your account
7. When you open the email, click on the Account Confirmation link
8. You will be redirected to a new window, which welcomes you to EIZ. Click on Continue to login
9. In the new window, enter your email address under Username and the password you created in
10. Password space
11. You will be logged into the system dashboard. On the left side of the screen, browse down to
12. where it says Profile and click on it.
13. When your profile page opens, click on Update just below the page
14. Update all your other information needed
15. Save and proceed to update your information

What are the requirements for membership application?

- Certified copy of University / College / Trades School certificate
- Certified copy of University / College / Trades School statement of result (Transcript)
- Updated CV (3 Pages Maximum)
- Certified copy of ID; i.e., NRC / first page of Passport
- Passport photo

How long does it take for a member to receive an invoice after applying?

Four (4) days

How long will it take for me to get my Membership Certificate after applying?

Four (4) days

Can I pay and also upgrade online?

- Yes, payments can be made online using EFTs
- An option for upgrade is provided when you log in on your profile

FAQ

FREQUENTLY ASKED QUESTIONS



How much do I have to pay to upgrade to graduate engineer?

	Processing Fees	Subscription Fees	Building Levy (New Reg)	Registration	Total
Graduate Engineer	K60	K200	-	-	K200

How much is renewal for technicians?

Certified technician	K1,010.00
Full Technician	K880.00
Trainee Technician	K380
Student Technician	K130

How do I send the proof of payment?

- Send message or proof of payment to 07774900049 WHATSAPP LINE

How do I get a quotation?

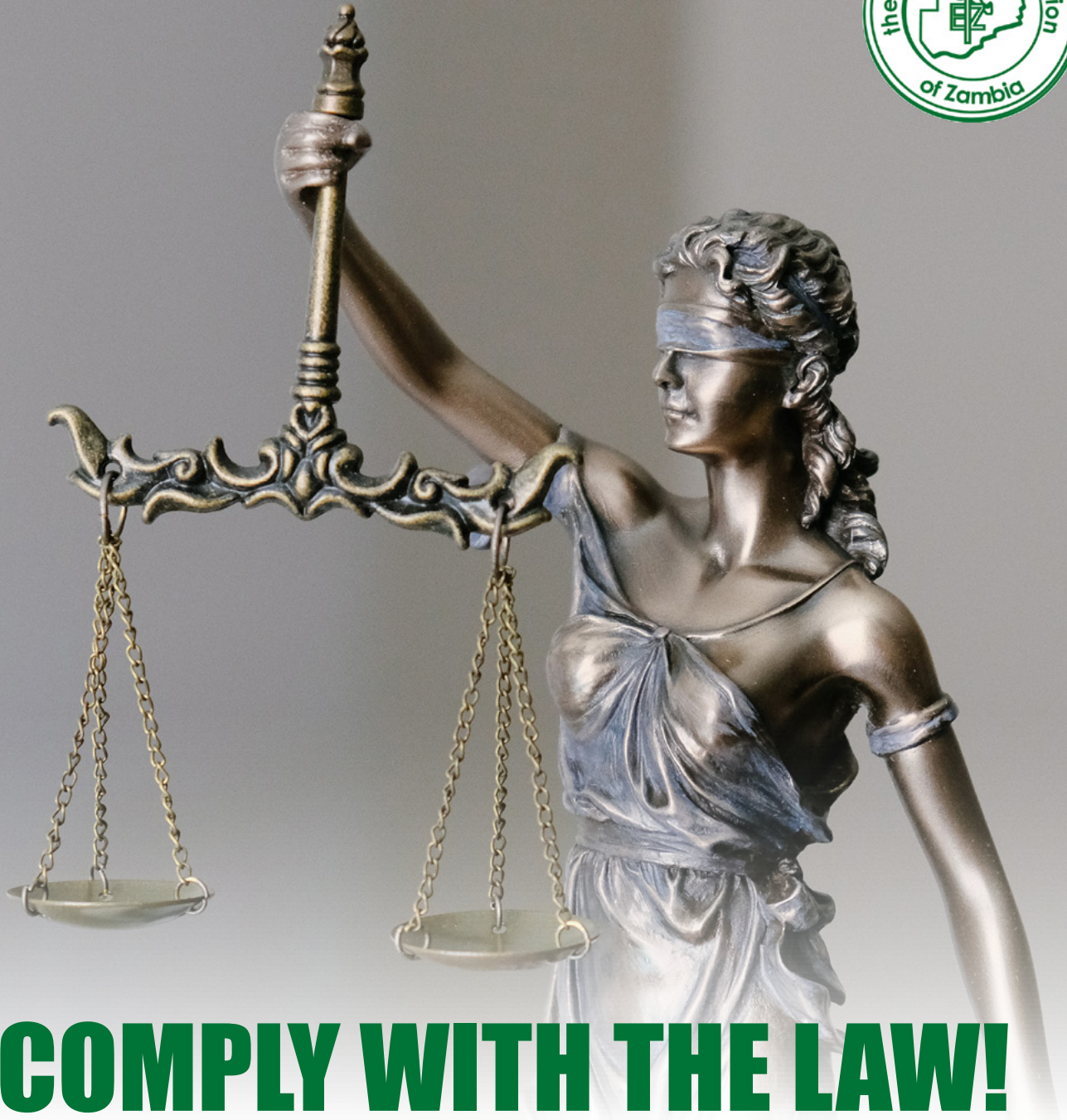
- For new applicants, once the application has been approved an invoice is sent directly to the email provided.
- For renewals, send a request to eiz@eiz.org.zm

What are the requirements for company registration?

16. Fill in the details on your accounts
17. Company profile
18. PACRA certificate of incorporation and computer printout
19. Valid ZRA Tax clearance certificate
20. Two(2) Valid EngRB practicing licenses of employees responsible for Engineering operations

How long does it take for my company certificate ready upon registration?

Two (2) weeks.



COMPLY WITH THE LAW!

Hiring Engineering Professionals without valid EIZ Membership and practicing licences is illegal!

It is law that all individuals or organisations engaged to carry out any engineering works must be registered and regulated by the EIZ according to the act of Parliament EIZ Act no 17 of 2010:

For further clarification, contact the membership team on:

02 11 255 161

Or visit our website on www.eiz.org.zm