



GhIE

GHANA INSTITUTION OF ENGINEERING

NEWSLETTER

JULY 2026

GHIE LAUNCHES GHANA INFRASTRUCTURE REPORT CARD 2026 Calls for Urgent National Infrastructure Reforms



Deputy Minister for Works, Housing and Water Resources, Hon. Gizella Tetteh Agbotui (2nd right), flanked by the leadership of the Ghana Institution of Engineering (GhIE), officially launched the Ghana Infrastructure Report Card (GIRC) 2026 in Accra on 14 July 2026.

The Ghana Institution of Engineering (GhIE) has officially launched the Ghana Infrastructure Report Card (GIRC) 2026, an independent engineering assessment that evaluates the state of Ghana's critical infrastructure and provides evidence-based recommendations to inform national planning, investment and policy.

The report assigns Ghana an overall score of 57% (Grade D3), indicating that while investments have been made over the past decade, overall infrastructure performance has remained largely unchanged. It identifies inadequate funding, weak asset management and a poor maintenance culture as key challenges affecting infrastructure delivery.

Speaking at the launch, GhIE President, Ing Ludwig Annang Hesse, described the Report Card as a strategic tool for supporting evidence-based decision-making and promoting accountability in infrastructure development.

Engineers Must Lead Ghana's Industrial Transformation – VRA Chief Executive



Ing Edward E. Obeng-Kenzo, Chief Executive Officer of the Volta River Authority (VRA), delivering the keynote address during the GhIE-Professor Douglas Boateng Annual Lecture Series at the Engineering Centre, Roman Ridge, Accra, on 16 July 2026.

The Chief Executive of the Volta River Authority (VRA), Mr Edward E. Obeng-Kenzo, has called on engineers to take a strategic leadership role in driving Ghana's industrialisation agenda, stressing that the success of the Government's 24-Hour Economy will depend on engineering innovation, resilient infrastructure and long-term planning.

Delivering the keynote address at the 2nd GhIE-Professor Douglas Boateng Lecture Series, Mr Obeng-Kenzo described the initiative as both an engineering challenge and a national opportunity, urging engineers to provide the technical leadership required to build a competitive and industrialised Ghana.

He encouraged the Ghana Institution of Engineering (GhIE) to strengthen its role as the nation's engineering think tank by providing evidence-based policy advice, promoting engineering excellence and championing investments in sustainable infrastructure.

Founder of the lecture series, Professor Douglas Boateng, underscored the importance of long-term thinking and strategic dialogue in shaping Ghana's industrial future, while GhIE President-Elect, Ing Sophia Tijani, highlighted the critical role of reliable electricity in supporting the Government's 24-Hour Economy agenda.



From left (5th) Professor Douglas Boateng Rev. Dr. Joyce Aryee and Ing Edward Obeng Kenzo joined by other key dignitaries



Ing Edward E. Obeng-Kenzo (left) receiving a Plaque of Honour from Professor Douglas Boateng in recognition of his distinguished contribution to engineering leadership during the GhIE-Professor Douglas Boateng Annual Lecture Series.



Some of the distinguished guests and dignitaries who attended the GhIE-Professor Douglas Boateng Annual Lecture Series held at the Engineering Centre, Roman Ridge, Accra, on 16 July 2026.



Rev. Dr. Joyce Aryee (centre) in a group photograph with the leadership of the Ghana Institute of Engineering (GhIE) ahead of the GhIE-Professor Douglas Boateng Annual Lecture Series at the Engineering Centre, Accra.

EEAwards 2026 Nominations Now Open



GhIE

GHANA INSTITUTE OF ENGINEERING



**CALL FOR
NOMINATIONS**

ENGINEERING EXCELLENCE AWARDS 2026

RECOGNIZING EXCELLENCE



WHO CAN BE NOMINATED

- Engineering Professionals
- Engineering Organisations
- Individuals
- Leaders
- Projects



CATEGORIES

- Individual Excellence Awards
- Innovation & Technology Advancement Awards
- Sector Specific Excellence Awards (GhIE Divisions)
- Public Impact & Policy Awards
- Organisational & Team Excellence Awards
- Executive Leadership Award



SCAN TO NOMINATE

CLOSING DATE

15th September 2026

The Ghana Institution of Engineering (GhIE) is pleased to announce nomination for the Engineering Excellence Awards (EEAwards) 2026, a flagship awards program celebrating excellence across the engineering profession.

The awards recognise engineers, engineering organisations, engineering projects and journalists whose work has made outstanding contributions to engineering, innovation, leadership and national development. Members are encouraged to nominate individuals, organisations, project or journalist whose achievements deserve national recognition.

Nominations close on Tuesday, 15 September 2026.

The success of the awards depends on the support of the engineering community. In addition to submitting nominations, members are encouraged to help promote the campaign by following GhIE on **Facebook, Instagram, LinkedIn and X**, and by liking, commenting on and sharing our Engineering Excellence Awards posts. Members can also amplify the campaign by sharing EEA flyers and updates with colleagues, organisations and professional networks.

Together, we can celebrate engineering excellence, inspire innovation and recognise those shaping Ghana's future through engineering.

Submit your nomination today at www.ghie.org.gh.

Celebrating Professional Excellence



GhIE congratulates Ing. Prof. Emmanuel Kwesi Nyantakyi, F-GhIE

The Ghana Institution of Engineering (GhIE) extends its heartfelt congratulations to Ing. Prof. Mary Antwi on your promotion to Associate Professor in Land Management and Geoinformatics at the Department of Environmental Management, School of Natural Resources, University of Energy and Natural Resources (UENR), Sunyani.

This significant achievement reflects your commitment to academic excellence, impactful research, and the advancement of engineering and the built environment. We celebrate this important milestone and wish you continued success in your academic and professional journey.



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Accra Technical University Inaugurates GhIE Student Chapter



Inauguration of New Executives of Accra Technical University Student Chapter, July 13, 2026 on Campus

The Ghana Institute of Engineering (GhIE), Branch 4, has inaugurated the Accra Technical University (ATU) GhIE Student Chapter, marking another milestone in the Institution's efforts to nurture the next generation of engineering professionals.

The inauguration ceremony was held at the ATU Auditorium on 13 July 2026 in accordance with the GhIE By-Laws. The event attracted about 200 students, together with the Chapter Patron and members of the University's teaching and non-teaching staff

A GhIE Branch 4 delegation, led by the Branch Chairperson, Ing. Frank Pinto, officiated the ceremony and encouraged students to uphold professionalism, innovation and ethical engineering practice throughout their academic and professional journeys.

The establishment of the student chapter forms part of Branch 4's membership development strategy to strengthen student engagement and provide aspiring engineers with opportunities for mentorship, professional networking and career development within the engineering fraternity.

GhIE Secretariat Staff Joins National Cleaning Exercise



The Ghana Institution of Engineering (GhIE) joined the Government of Ghana's National Cleaning Exercise, with secretariat staff participating in a clean-up of the Institution's office environment to promote cleanliness, health and environmental sustainability. Through activities such as these, the Institution continues to encourage a culture of environmental responsibility while supporting national efforts to build a cleaner and healthier Ghana.

GhIE Branch 6 Partners Ho Technical University to Promote Engineering Innovation

The Ghana Institution of Engineering (GhIE), Branch 6, in partnership with the Faculty of Engineering of Ho Technical University (HTU), successfully organised the 2026 Engineering and Innovation Week, providing students with a platform to showcase innovative engineering solutions to national challenges.

A key highlight of the event was the Inter-Departmental Project Pitching Competition, where students presented practical innovations in healthcare, agriculture, environmental sustainability and smart transportation.

Among the featured projects were NephroScan, an AI-powered system for the early detection of Chronic Kidney Disease; a Multipurpose Solar-Electric Dryer to reduce post-harvest losses; PyroSmart, a solar-powered technology that converts plastic waste into useful products; and SmartFlow, an adaptive traffic signal system designed to improve traffic flow and road safety.

At the end of the competition, participating departments and student teams received certificates of participation and cash prizes in recognition of their outstanding innovations.

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The event reinforced GhIE Branch 6's commitment to promoting engineering education, innovation and industry-academia collaboration while inspiring the next generation of engineers to develop practical solutions for Ghana's sustainable development.



Department of Electrical and electronics Eng. receiving certificates



Department for Agricultural Eng. students receiving certificate



Department of Mechanical Eng. students receiving certificate



Presentation of trophy to the winning team from the department of Civil eng.

GhIE Inspires Future Engineers at UMaT's Second Engineering Summit



From left are Ing Dr Kenneth Ashigbey, Chief Executive Officer, Ghana Chamber of Mines; Ing Mrs Sophia Abena Tijani, President-Elect, Ghana Institution of Engineering; Mr Kwame Kwakye, Chairman, Affiliate Committee, Ghana Chamber of Mines; Ms Angela D. Attieh, Founder and Chief Executive Officer, NGUVU Mining Limited; and Mrs Mary Asante-Asamoah, Executive Director, Barbex Africa Projects Limited. The panellists encouraged students to embrace innovation, leadership, entrepreneurship and lifelong learning to become globally competitive 21st-century engineers

The Ghana Institution of Engineering (GhIE), in collaboration with the University of Mines and Technology (UMaT) Student Chapter, Essikado Campus, organised the Second Engineering Summit in July 2026, bringing together industry leaders and students to discuss the skills and mindset required to thrive in the rapidly evolving engineering profession.

The summit featured a high-level panel discussion with Ing Dr Kenneth Ashigbey, Chief Executive Officer of the Ghana Chamber of Mines; Ing Mrs Sophia Abena Tijani, President-Elect of the Ghana Institution of Engineering; Ms Angela D. Attieh, Founder and Chief Executive Officer of NGUVU Mining Limited; Mr Kwame Kwakye, Chairman of the Affiliate Committee of the Ghana Chamber of Mines; and Mrs Mary Asante-Asamoah, Executive Director of Barbex Africa Projects Limited.

Sharing insights from their diverse professional experiences, the panellists encouraged students to take full advantage of their student membership of GhIE by actively participating in professional development activities, networking opportunities and mentorship programmes.

The speakers emphasised that success in today's engineering profession extends beyond technical competence. They urged students to develop the attributes of a 21st-century engineer, one who is innovative, strategic, entrepreneurial, an effective communicator and an inspiring leader capable of navigating complex social, economic and technological challenges.

The panel further encouraged students to embrace lifelong learning, uphold professional ethics and continuously build skills that will enable them to contribute meaningfully to Ghana's industrialisation and sustainable development.

GhIE Branch 5 Bridges Theory and Practice with Dalun Water Treatment Plant Tour



Students from department of Civil engineering at Tamale Technical University on tour at the Dalun water treatment plant at Tamale on July 15, 2026

The Ghana Institution of Engineering (GhIE), Branch 5, in collaboration with the Department of Civil Engineering at Tamale Technical University, organised an educational visit to the Dalun Water Treatment Plant on 15 July 2026, giving 150 Civil Engineering students first-hand exposure to municipal water treatment operations.

During the tour, students interacted with engineers from the Ghana Water Company Limited (GWCL) and observed the complete water treatment process from raw water intake to treatment, disinfection and distribution. The visit provided valuable insight into plant operations, maintenance practices and the challenges of delivering safe drinking water to the Tamale Metropolis and surrounding communities.

The industrial visit enabled students to connect classroom theory with practical engineering applications while appreciating the critical role of water infrastructure in national development.

The initiative underscores GhIE Branch 5's commitment to developing industry-ready engineers by promoting experiential learning and strengthening collaboration between academia and industry. The Institution expressed appreciation to the management and staff of the Ghana Water Company Limited for supporting the students' professional development.

Reclaiming Galamsey Lands: A Science-Based Path to Restoring Ghana's Environment



By Ing Gideon Etornam
Amenuveve



By Emmanuel Bonney

Illegal mining, popularly known as galamsey, has become one of Ghana's greatest environmental challenges, leaving behind polluted rivers, degraded forests, abandoned pits and contaminated farmlands. Toxic heavy metals such as mercury, arsenic, cadmium and chromium continue to threaten ecosystems, food security and public health long after mining activities have ceased.

The pressing question is no longer whether these damaged landscapes should be reclaimed, but how Ghana can restore them effectively and sustainably.

Environmental scientists argue that the answer lies in adopting science-based reclamation practices that have successfully restored abandoned mine sites around the world.

Reclamation Comes Before Restoration

Although the terms are often used interchangeably, reclamation and restoration serve different purposes.

Reclamation focuses on making degraded land safe, stable and productive again. This involves filling abandoned pits, reshaping unstable landscapes, improving soil quality and establishing vegetation to prevent erosion. While reclaimed land may not immediately resemble the original ecosystem, it becomes suitable for productive uses such as forestry or agriculture.

Restoration, however, aims to return the land to its original ecological condition by rebuilding native forests, restoring biodiversity, improving soil health and recovering the ecosystem services that existed before mining. Although restoration delivers greater long-term environmental benefits, it is significantly more complex, expensive and time-consuming.

Given the widespread destruction caused by galamsey, experts believe reclamation represents the most practical first step, with ecological restoration becoming achievable over time.

Science Offers Practical Solutions

Effective land reclamation begins with reshaping the landscape by filling mining pits, stabilising slopes and improving drainage to minimise erosion.

Equally important is restoring soil health through the application of compost, lime and biochar, which improve fertility while reducing soil acidity and immobilising toxic metals.

Vegetation also plays a critical role. Rather than relying solely on tree planting, scientists recommend combining timber species with plants capable of removing contaminants through phytoremediation, a natural process in which plants absorb heavy metals from contaminated soils.

Research conducted in Ghana has demonstrated the potential of naturally occurring species such as *Chromolaena odorata* (Akyeampong) and *Mimosa pudica* (Sensitive Plant) to absorb heavy metals, particularly cadmium and lead. Studies also indicate that biochar produced from agricultural waste, including cocoa pods and rice husks, can reduce mercury and arsenic contamination while improving soil fertility.

Timber species such as teak, mahogany, emire and ofram remain valuable for long-term forest recovery, carbon sequestration and economic returns. However, their primary role is ecosystem restoration rather than rapid removal of soil contaminants. Integrating these species with phytoremediator plants offers a more effective and sustainable reclamation strategy.

Strengthening Ghana's Response

Ghana's mining legislation including Legislative Instruments (L.I.) 1652, 2173, 2182 and 2462 requires licensed mining companies to submit reclamation, mine closure and post-mining land-use plans before operations commence or cease. These provisions have helped improve environmental accountability within the formal mining sector.

The challenge, however, lies with illegal mining operations, which disregard these legal requirements and abandon degraded landscapes without rehabilitation.

Addressing this challenge requires a coordinated national response grounded in science. Experts recommend comprehensive soil and water quality assessments, pilot reclamation projects using locally adapted plant species, phased revegetation programmes, active community participation and continuous environmental monitoring to measure reductions in heavy metal contamination.

A National Responsibility

Reclaiming galamsey-degraded lands is about far more than planting trees. It is about restoring ecosystems, protecting water resources, safeguarding public health and securing the livelihoods of future generations.

With science-driven policies, strong political commitment and sustained community involvement, Ghana can transform abandoned mining landscapes into productive forests and resilient ecosystems. The environmental damage caused by galamsey is severe, but it is not irreversible. Through evidence-based reclamation, today's scarred landscapes can become tomorrow's restored natural heritage.

About the Authors

Ing Gideon Etornam Amenuveve is a Professional Engineer (GhIE), Chartered Safety Professional (CMIOSH) and Lead Risk Manager with expertise in engineering, safety and environmental management.

Emmanuel Bonney holds an MPhil in Environmental Science and specialises in environmental sustainability, ecosystem restoration and natural resource management.

Ghana Institution of Engineering Newsletter

Don't just read it – be part of it!

This newsletter is compiled and produced by the Newsletter, Website, and Magazine Sub Committee of the Ghana Institution of Engineering's Publications Committee: Ing Joseph Xavier Francisco Ribeiro (Ph.D.) • Ing Prof. Emmanuel Kwame Appiah-Adjei • Ms. Augustina Nyarkoa Amoateng • Ing Miriam Korantema Amponsah • Ing David Addae • Ing Daniel Asseh Allan • Ing Kwame Sakyi-Bekoe • Indira Teiko Nartey –O Khama

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GhIE Ethical Insight

Powered by the Professional Practice and Ethics Committee

This Week's
Buzzword:

HONESTY

Code of Ethics 2.1.1

"2.1.1 **Honesty**, justice, and integrity form a moral philosophy, which associated with mutual interest among people, constitute the foundation of ethics. Members and Registered Entities of the Ghana Institution of Engineering shall recognize such a standard as a set of dynamic principles to guide their conduct and way of life; their duty to practice the profession according to this Code of Ethics"



Remember:

Even when honesty isn't easy, it's essential for long-term credibility and ethical leadership in engineering.