FEC

Future of Energy Conference

2026

#FEC2026

Concept Note

ACEP Africa Centre for Energy Policy

Future of Energy Conference

25th – 26th August, 2026

8:30am Each Day

Labadi Beach Hotel, Accra, Ghana

Theme

Powering Africa's Industrial Transformation: Energy Systems for Value Addition and Competitiveness

Accra, Ghana

Background

The Future of Energy Conference (FEC) is an annual platform to drive stakeholder collaboration towards an inclusive and sustainable energy future for Africa. It provides a strategic space to interrogate how the continent's energy systems can support economic transformation, moving beyond access to address the structural conditions required for industrialisation, value addition, and long-term competitiveness. The Conference also critically explores strategies to harness its natural resource endowment to address energy poverty while positioning itself within evolving global supply chains linked to the energy transition.

Reflecting on the 2025 Future of Energy Conference

The 2025 edition, held in Accra under the theme "Financing Africa's Energy Future: Unlocking Investments for Energy Access and Economic Transformation," convened policymakers, industry leaders, financiers, and civil society to explore strategies for bridging persistent energy access gaps and mobilising investments critical to economic transformation.

Deliberations highlighted that conventional donor-led and public financing approaches are insufficient to meet Africa's energy and development needs. Participants emphasised the importance of innovative financing mechanisms, stronger policy coordination, and the mobilisation of domestic capital. The Conference also underscored the need to align energy investments with industrial development priorities, regional value chains, and equitable economic growth.

The 2025 Conference established a critical foundation by identifying financing, governance, and investment barriers. However, it also revealed that even where investment is mobilised, the underlying cost, reliability, and configuration of energy systems continue to constrain industrialisation outcomes. These insights set the stage for a broader interrogation of the cost of energy as a key driver of Africa's industrialisation. It also recognises that industrial outcomes are equally shaped by system reliability, market structures, regional power trade, infrastructure, technology pathways, and policy and institutional frameworks.

About 2026 Future of Energy Conference

The 2026 Future of Energy Conference therefore convenes at a decisive moment for Africa's industrial and energy ambitions. The continent possesses a unique combination of mineral wealth, renewable energy potential, and growing regional markets that position it become a global for industrial development and clean energy innovation.

Across the continent, countries are moving from policy ambition towards implementation across a broader industrial landscape shaped by energy systems. The Democratic Republic of Congo and Zambia are exploring local refining and entry into battery value chains. South Africa is also leveraging its

platinum group metals to develop hydrogen-linked industries. Mozambique and Madagascar are targeting downstream graphite processing, while Ghana is advancing integrated aluminium production and lithium processing. In North Africa, Morocco is positioning itself as a renewable energy-powered manufacturing hub linked to European markets, while Egypt is advancing green hydrogen and industrial-scale energy export opportunities. These developments signal a broader transition towards energy-enabled industrialisation across sectors including manufacturing, mineral processing, and emerging digital industries. It reflects a growing recognition that energy systems are not only inputs, but strategic enablers of industrial competitiveness and structural transformation.

However, realising this opportunity depends on the ability of energy systems to support industrialisation at scale. Industrial processes such as aluminium smelting, copper refining, lithium processing, and fertiliser production are highly sensitive to electricity cost and reliability. These outcomes are driven by structural constraints that cut across technical, financial, and institutional dimensions. The constraints reinforce each other in a cycle where weak infrastructure and high financing costs raise electricity prices, while poor cost recovery and utility governance limit reinvestment.

These challenges are compounded by weak alignment across energy, mineral, and industrial policies, as well as underdeveloped regional power markets, where infrastructure gaps and market risks limit the benefits of integration. While viable supply options exist across renewables, gas, storage, and hybrid systems, their deployment remains misaligned with industrial demand, limiting their impact on competitiveness. Without deliberate energy planning, industrial policies risk remaining aspirational rather than transformative.

The 2026 edition of the Future of Energy Conference responds to these challenges by moving beyond broad policy ambition to focus on how energy systems can practically support industrialisation. It will examine the cost of energy in Africa, reliability constraints, infrastructure and market readiness, and identify concrete pathways for better aligning energy planning, industrial strategy, and investment decisions. The Conference convenes a broad cross-section of stakeholders, including policymakers, industry, finance, civil society, academia, and regional institutions, among others, to enable cross sectoral coordination. It provides a platform to align priorities and advance practical pathways for energy-enabled industrial development.

Conference Objectives

The 2026 Future of Energy Conference seeks to:

1. ·Assess Africa's readiness to support broad based industrialisation through energy systems that are reliable, scalable and cost-competitive.
2. ·Examine structural drivers of energy costs and their implications for industrial competitiveness across key sectors.
3. Identify scalable infrastructure, market and technology solutions required to deliver reliable, competitive power.
4. Strengthen alignment between, energy systems, industrial policy and resource based development, including but not limited to critical mineral value chains.

Expected Outcomes

1. A policy framework to reduce industrial energy costs while maintaining utility sustainability.
2. Recommendations for integrated energy planning aligned with industrial and mineral development strategies.
3. Identification of priority infrastructure investments to power industrial corridors and beneficiation hubs.
4. Strengthened cross-sector dialogue among energy, mining, finance, and trade actors.
5. A post-conference policy reform to guide actionable implementation.

Structure

The 2026 Future of Energy Conference (FEC) is structured around three broad categories: plenary sessions, side events, and exhibitions over two days. The plenary sessions are interspersed with keynote speeches, paper presentations, expert submissions, and panel sessions on issues focused on the theme.

The parallel side events headlined "Deep Dive Dialogues: Partner-Led Perspectives on Africa's Energy Transformation" provide the opportunity for other stakeholders (including governments, the private sector, academia, CSOs, multilateral institutions etc) to lead discussions centred around the Conference's thematic architecture. Each day will be crowned with the innovation challenge where contestants pitch their innovative energy solutions. The winner (s) would be announced at the closing ceremony of the Conference. The Conference also provides a platform for the exhibitions of innovative energy solutions and products from all stakeholders, dubbed "The Innovation and Investment Arena.".t creates the platform to bring together innovators, research and development, investors, and industry leaders to interface and foster partnerships.

Thematic Architecture

1. The Economics of Power: Understanding Africa's Energy Cost Structure

Industrial competitiveness is fundamentally shaped by the cost and reliability of electricity. This requires a shift from planning energy systems for access alone to designing them explicitly for industrial competitiveness, cost efficiency, and scale. This theme analyses the structural drivers of energy cost,

including tariff design, generation mix, financing costs, fuel exposure, and system inefficiencies including losses associated with gas flaring and methane leakage in gas-to-power systems. It will benchmark African industrial sector against global peers, and propose reforms to balance industrial competitiveness, household affordability, and utility sustainability.

2. Technology Pathways for Competitive Industrial Energy

Africa's energy landscape combines vast renewable potential with substantial natural gas resources, providing a strong foundation for competitive power systems. However, translating this potential into industrial-grade electricity depends on effective system design, technology integration, and alignment with demand. This theme focuses on how different technology configurations can deliver industrial-grade electricity. It will examine least-cost pathways across renewables, gas, storage, and hybrid systems, with emphasis on system integration, scalability, and reliability. Rather than technology promotion, the focus will be on fit-for-purpose system design that balances cost, stability, and transition objectives..

3. Regional Integration and Energy Trade

National systems alone may not deliver the scale or cost efficiency required for industrialisation. Emerging cross-border initiatives, including renewable energy projects in Tunisia designed to supply electricity to Italy, demonstrate that large-scale power trade is feasible. The key challenge is why such optimisation remains limited within Africa. This theme examines opportunities through the African Continental Free Trade Area and existing regional power pools to optimise generation resources, aggregate industrial demand, harmonise regulations, and reduce costs while enabling cross-border industrial corridors.

4. Financing Industrial Energy Infrastructure

The cost of capital remains a fundamental driver of electricity costs and industrial competitiveness in Africa. This theme examines how financing structures, including blended finance, public–private partnerships, and risk mitigation instruments, influence tariffs, system expansion, and long-term sustainability. It explores how to reduce financing costs while maintaining utility viability, investor confidence, and fiscal stability. The theme will also assess how improving efficiency in power systems (e.g. reducing losses from flaring and methane leakage) can enhance project bankability, lower operational risks, and unlock access to climate and transition finance.

5. Energy Systems and Policy Alignment for Industrial Competitiveness

Industrialisation does not occur automatically where power is available. It is shaped by deliberate industrial policy choices that determine where industries are located, which sectors are prioritised, and how energy systems are developed to support them. For industrial growth to take root, energy systems must be designed to meet the scale, reliability, and consistency required by priority sectors such as manufacturing, mineral processing, and emerging industries. These technical outcomes are ultimately shaped by policy decisions. In many contexts, weak coordination across energy, trade and industry, finance, and natural resource institutions results in fragmented planning, misaligned investments, and power systems that do not support industrial competitiveness. Without a clear industrial policy framework anchored on competitively priced and reliable power, energy investments risk remaining disconnected from economic transformation objectives. This theme examines how governments can design and implement industrial policies in which energy systems are deliberately configured to support industrial development. It will explore coordination mechanisms, policy coherence, and decision-making frameworks needed to align power system planning with industrial priorities.

Innovation Challenge

Step into the Innovation Challenge, a dynamic space at the Future of Energy Conference 2025, designed to connect Africa's brightest minds with key stakeholders. This platform invites entrepreneurs, researchers, and industry professionals to pitch and showcase groundbreaking energy solutions – from renewable technologies and smart grids to innovative financing models. Over two days, finalists will present their ideas to expert judges and a diverse audience of policymakers, investors, and industry leaders. The challenge aims to identify and support transformative innovations that enhance energy access, reliability, efficiency, and sustainability across Africa. Winner(s) will receive recognition, mentorship, and potential funding support to bring their solutions to market. Join us to witness the future of energy innovation and be part of the collaborative movement driving Africa's energy transformation.

Exhibition - The Innovation and Investment Arena

Experience the future of energy at our interactive exhibition space. The innovation and investment arena creates the platform to connect key stakeholders – investors, policymakers, and innovators – showcasing scalable clean energy technologies, emerging investment opportunities, and transformative business models. The platform will facilitate knowledge exchange and address information asymmetry among key stakeholders. The arena will empower attendees with critical insights, foster strategic partnerships, and drive informed decision-making to unlock scalable and sustainable energy investments across Africa.

Side Events - Deep Dive Dialogues: Partner-Led Perspectives on Africa's Energy Transformation

The 2026 FEC side events are partner-led, interactive sessions designed to complement and extend the main conference discussions. Convened by partner institutions, development partners, governments, agencies, and sector specialists, these events provide a platform to delve deeper into plenary themes and broader Conference focus, offering practical insights, technology demonstrations, and targeted policy dialogue. The FEC 2026 side events are leveraging partner expertise and aligning with plenary discussions to ensure that conference dialogues translate into actionable strategies, collaborative partnerships, and practical interventions that advance Africa's energy access, industrial competitiveness, and sustainable development objectives.

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