

Energy America Launches ASTROVOLT to Accelerate Africa's Clean Energy Future

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San Francisco, California – July 2, 2025 – <u>Energy America</u>, a U.S.-based leader in next-generation solar technologies and sustainable infrastructure, is proud to announce the official launch of <u>AstroVolt</u>, its global flagship solar module brand, dedicated to accelerating Africa's renewable energy transition.

The AstroVolt series represents a convergence of American innovation, African development priorities, and planetary resilience—designed and engineered in the United States using NASA-backed <u>Centauri</u> technology, delivered through Ganymede Utilities EPC, and deployed across the continent in collaboration with Enamax, Energy America's strategic African partner.

A Transformational Step Toward Energy Equity in Africa

AstroVolt marks a bold new chapter in Africa's energy development, enabling the deployment of utility-scale, commercial, and distributed solar systems tailored to the continent's diverse geographies—from equatorial regions and coastal belts to desert and savannah climates. The modules are optimized for high-temperature performance, sand and humidity tolerance, and seamless integration with Battery Energy Storage Systems (BESS) and hybrid power generation platforms.

The launch follows Energy America's growing presence and pipeline across Africa, with near-term projects and partnerships in:

Liberia: National grid modernization, solar-BESS power plants, and IPP development

Tanzania, Uganda, and Rwanda: Hybrid solar projects, desalination systems, and institutional electrification

Kenya and Nigeria: Urban-industrial solar development, C&I deployments

South Africa: Technology integration, high-efficiency module testing, and grid-scale project collaboration

AstroVolt Modules: NASA-Inspired, Africa-Ready

AstroVolt modules range from 500W to 750W, featuring:

Centauri Selenium Interlayer Solar Cell Technology, licensed from NASA and optimized for both terrestrial and space environments

Graphene-enhanced coatings for improved heat dissipation, durability, and light absorption

Bifacial and monofacial architectures, available in glass-glass and glass-backsheet formats

Full compatibility with off-grid, grid-tied, and hybrid configurations

With Centauri's support, AstroVolt also serves as the foundation for dual-use applications, including space-based power systems, modular water desalination units, and Al-augmented energy management systems tailored for emerging markets.

"AstroVolt is the embodiment of our promise to Africa—to deliver advanced, Americanengineered solar solutions that are resilient, scalable, and equitable. By fusing technology, finance, and local partnerships, we're setting a new standard for clean energy delivery across the continent," said Zoheb Khan, Director at Energy America.

Enamax: Local Expertise, Global Vision

To ensure sustainability and local empowerment, all AstroVolt deployments in Africa will be implemented in partnership with Enamax, Energy America's regional development and business liaison partner. Enamax will lead:

Stakeholder and government engagement

Permitting, site development, and PPA structuring

Community integration, job training, and local labor sourcing

Enamax's pan-African presence ensures that each project is developed with regional specificity and a long-term vision of energy sovereignty, employment generation, and technological localization.

Ganymede Utilities: Turnkey EPC for the Continent

AstroVolt projects will be delivered under the leadership of Ganymede Utilities, Energy America's full-service EPC (Engineering, Procurement, and Construction) arm. Ganymede brings over 20GW of global EPC experience across solar PV, BESS, hydrogen-solar hybrid plants, and mini-grids. Services include:

Feasibility and grid interconnection studies

Detailed engineering and design optimization

Procurement of AstroVolt and auxiliary equipment

Construction, commissioning, and long-term O&M

"With Ganymede leading execution, we ensure AstroVolt projects meet the highest global standards in bankability, performance, and scalability. Our end-to-end EPC model is designed to de-risk project delivery across varied African terrain," said Imran Bakht, Vice President, Ganymede Utilities.

Centauri: The R&D Powerhouse Behind AstroVolt

Centauri, Energy America's research and development division, is the creator of the proprietary Selenium Interlayer Cell Architecture that powers AstroVolt. Drawing on technologies originally developed for extreme space missions under NASA guidance, Centauri's engineering breakthroughs include:

Radiation and thermal validation for durability in harsh climates

TRL 6-certified prototypes ready for space and desert trials

Graphene-selenium hybrid coatings for energy density and efficiency optimization

Al-integrated smart module telemetry for condition-based monitoring

Centauri is actively expanding its pilot production line and R&D partnerships in the U.S. and Africa to support AstroVolt innovation and regional manufacturing localization.

Investment and Financing Structure The AstroVolt Africa launch is supported by a vertically integrated capital structure that combines:

The EA Capitol Infrastructure Fund: A private equity platform targeting over \$1.5 billion in renewable energy infrastructure across Africa and emerging markets

EXIM Bank of the United States: For sovereign-backed and utility-scale projects under U.S. clean technology export financing

Development finance institutions and climate funds: For blended finance, guarantees, and concessional capital

AstroVolt projects will be structured under IPP, PPA, and Public-Private Partnership (PPP) models, with flexible design-to-finance alignment and robust investor protection mechanisms.

A Global Vision Anchored in Africa

The launch of AstroVolt is a cornerstone of Energy America's 10GW global development strategy through 2030, with Africa as a central pillar. In addition to technology deployment, the company is committed to:

Establishing local assembly and training centers

Partnering with universities and innovation hubs for R&D and workforce development

Supporting policy alignment with African Union, AfDB, and national electrification roadmaps

"Africa doesn't need catch-up tech. Africa needs frontier solutions. AstroVolt is our commitment to delivering that—made in America, made for Africa, and made to last," concluded Khan.

About Energy America

Energy America is a U.S.-based, vertically integrated renewable energy company with global capabilities across manufacturing, EPC, financing, and innovation. Through its divisions:

Centauri – Advanced R&D and NASA-aligned solar technology

Ganymede Utilities – Global EPC and infrastructure execution

Enamax – African development, stakeholder alignment, and local operations

AstroVolt – American-made, high-efficiency solar modules for global markets

Energy America is advancing clean energy solutions across the U.S., Africa, LATAM, the Middle East, and the Asia-Pacific—delivering sustainable impact at gigawatt scale.

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