The WomEngineers JOURNAL

EMPOWERING WOMEN. ENGINEERING THE FUTURE.

1ST EDITION
MAY 13, 2026

LEADING WITH PURPOSE

How women engineers are shaping industries and communities.

INNOVATE. INSPIRE. IMPACT.

Real stories.
Bold ideas.
Better tomorrow.

BREAKING BARRIERS!

Celebrating women engineers who challenge limits, drive change, and build the future.

ENGR. EKWUTOSIM MERCEDES OKWUKOGU
Pioneering Progress.
Building solutions.
Empowering generations.

INSPIRE
Real stories.
Bold ideas.

INNOVATE
Emerging tech.
Smart solutions.

EMPOWER
Careers. Growth.
Opportunities.

IMPACT
Building today for a better tomorrow.

PEOPLE • INNOVATION • CAREERS • LIFESTYLE • OPPORTUNITIES

WomEngineers JOURNAL

1ST EDITION
MAY 13, 2026

FROM THE DESK OF THE

Editor-in-Chief

Breaking Barriers

By Engr. Asher Victoria Achile

There is something powerful about a woman who chooses to build.

To build despite limitations.
To build despite stereotypes.
To build despite fear.
To build even when the world quietly suggests that she should remain small.

This is the spirit behind **The Womengineers Journal.**

We are not merely launching a magazine.
We are documenting a movement.

For decades, engineering spaces across the world — especially in Africa — have largely been defined by male voices, male leadership, and male visibility. Yet behind many projects, innovations, breakthroughs, classrooms, boardrooms, laboratories, construction sites, refineries, and technical teams are brilliant women whose stories are rarely told loudly enough.

This journal exists to change that.

Here, we celebrate the woman in the hard hat and the woman behind the laptop.
The refinery engineer and the robotics student.
The mother balancing deadlines and home.
The young girl building her first science project.
The leader shaping policy.
The silent achiever whose excellence speaks before she does.

We believe engineering is not just about machines, structures, pipelines, systems, or equations.

Engineering is about courage.

It is the courage to solve problems.
The courage to innovate.
The courage to lead.
The courage to stand in rooms where few women stood before and still deliver excellence.

This first edition, themed **"Breaking Barriers,"** is deeply personal.

Many of us entered engineering environments where women were few. We learned quickly that competence alone was not always enough. We had to develop resilience, confidence, emotional intelligence, discipline, and sometimes extraordinary toughness just to occupy spaces others entered naturally.

Yet, despite the obstacles, women kept rising.

We rose in classrooms.
We rose in boardrooms.
We rose on project sites.
We rose in leadership.
And most importantly, we rose without losing our humanity.

In this edition, you will encounter stories of excellence, friendship, resilience, leadership, laughter, integrity, and transformation. You will meet women who are not merely surviving engineering — they are redefining it.

One of the greatest lessons I have learned is this:

Barriers are rarely broken by noise alone.
They are broken by consistency.

- Every woman who chooses excellence breaks a barrier.
- Every woman who mentors another woman breaks a barrier.
- Every young girl who dares to study STEM breaks a barrier.
- Every ethical leader who chooses integrity over compromise breaks a barrier.

The future of engineering in Africa will not be built by men alone.

Women are not just participating in the future.
We are engineering it.

- To every young girl reading this: Your dreams are valid.
- To every woman fighting silently to be respected in her field: Keep going.
- To every leader creating opportunities for women: Thank you.
- And to every reader of **The Womengineers Journal**:
  Welcome to a platform where brilliance, courage, innovation, and womanhood coexist unapologetically.

Engr. Asher Victoria Achile
Editor-in-Chief
The Womengineers Journal
"Where Women Build the Future"

WomEngineers JOURNAL

FEATURE INTERVIEW

"Face Your Path"

Engineer Ekwutosim Mercedes Okwukogu on Leadership, Integrity, Refineries, and Surviving as a Woman Engineer

One of the strongest voices in engineering is often the quiet professional who simply keeps showing up, doing the work, and maintaining integrity despite the pressures around them.

In this edition of The Womengineers Journal, we sit down with Engineer Ekwutosim Mercedes Okwukogu, a Civil Engineer and Lead, Contract Administration in Corporate Administration Services at NNPC Limited.

With nearly two decades of experience spanning refinery operations, engineering services, and corporate project execution, she reflects on her career journey, refinery operations, leadership, ethics, and the realities women engineers face in the workplace.

Early Life and Engineering Journey

Q: Can you introduce yourself to our readers?

My name is Engineer Ekwutosim Mercedes Okwukogu. I work in Corporate Administration Services as Lead, Contract Administration.

I am a Civil Engineer by education and training, and I later obtained a Master in Energy Management from Kaduna State University.

Entering NNPC

Q: What was your career journey into NNPC like?

I applied to work in NNPC while I was still serving. I had used my HND qualification for application, and shortly before completing NYSC, I applied for employment at NNPC.

I wrote the recruitment examination in Kano, did the interview in Abuja and later received an employment offer in 2007. Honestly, most of my professional experience has been built inside NNPC. This organization shaped a large part of my engineering career.

Life at Kaduna Refinery

"KRPC was once a beehive of activity."

After the company's Initial Professional Development programme, Engineer Mercedes was posted to the Kaduna Refining and Petrochemical Company, where she spent close to fourteen years.

She worked first in the Maintenance Department before moving to Engineering Technical Services Division (ETSD).

Q: What was refinery life like during active operations?

"It was vibrant," she recalls.

"There were tankers everywhere, operations running continuously, and teams working round the clock. I worked in Area One and moved regularly through plant locations during maintenance and turnaround activities."

She described witnessing major refinery processes firsthand, including shutdowns, maintenance coordination, and utility operations.

One of the transitions she remembers clearly was the gradual shutdown of plant systems and utilities.

"At some point, the refinery environment became almost like a desert compared to the active days. The activity reduced significantly because

production had slowed."

Can NNPC Refineries Work Again?

Q: Do you believe the refineries can become fully operational again?

"Absolutely," she says firmly.

According to her, the challenge is not necessarily technical capability, but execution, discipline, and leadership.

"We are very good at creating policies in Nigeria. The challenge is execution."

She emphasized that NNPC still possesses strong technical manpower capable of reactivating refinery systems, although external technical support may still be necessary for long-idle infrastructure.

"You cannot completely remove external expertise after facilities have been dormant for years. But the human resources within NNPC are strong enough to sustain operations once systems are restored."

Integrity in Engineering

"Time is resources."

One of the most influential people in her career was late Engineer Ian Gregory Udoh.

She remembers him as a decisive leader who hated unnecessary bureaucracy.

"He believed unnecessary delays cause work to be unnecessarily dragged thus wasting resources such as time."

She admired his ability to focus on solutions rather than creating obstacles.

"That decisiveness stayed with me."

Challenges as a Woman Engineer

"Do not give in."

Engineer Mercedes spoke candidly about the realities many women faced earlier in their careers.

"When we joined in 2007, there were very few female engineers."

She explained that some women faced inappropriate attention or pressure from senior male colleagues.

"I had to develop ways of protecting myself professionally without creating unnecessary conflict."

One of the strategies she adopted was insisting on official communication trails and professional processes.

"If someone wanted to see me officially, let there be documentation and proper reporting channels."

She now encourages younger women engineers to stand their ground professionally.

"Do not give in to pressure. Your competence should never be tied to your gender."

At the same time, she shared a nuanced perspective on gender conversations in engineering.

"I do not want women engineers to seek preferential treatment. Capacity is capacity. We are engineers because we are qualified."

Major Projects and Professional Pride

Among the projects she remembers most proudly was the installation of street lighting along the refinery access road in Kaduna.

She served as secretary of the procurement and implementation committee overseeing vendor selection and project execution.

"There were attempts to influence the process, but I stayed committed to transparency."

She emphasized that all vendors were evaluated strictly according to established criteria.

Another project she highlighted was the rehabilitation of the NNPC Towers in Abuja.

The work, she explained, gave her deeper insight into the structural differences amongst the towers and the engineering behind their original construction.

Advice to Young Women Engineers

"Be an engineer because it is what you truly want."

Engineer Mercedes believes passion must come before trends.

"Do not become an engineer simply because people say there are not enough women in engineering. Do it because it is genuinely what you want to do."

She stressed that long-term success in engineering requires genuine internal motivation.

"You need passion because engineering will challenge you."

Work Habits and Productivity

Her work philosophy is simple:

"I do not like carrying monkeys home."

By "monkeys," she means unfinished tasks and unresolved responsibilities.

She prefers to clear her desk daily, organize her priorities, and reduce mental clutter before leaving work.

She also enjoys: Reading, Yoga, Music, Tennis and Continuous learning

Spotify playlists often accompany her workday.

"Music helps me stay calm and focused."

Thoughts on Leadership

When asked whether she aspires to become GCEO someday, her answer was refreshingly honest.

"I am a very content person. Leadership is good, but I also value peace of mind."

She acknowledged the pressures attached to executive leadership and admitted she prefers balanced, effective work over constant tension.

Women in NNPC

"Women should carry each other."

Engineer Mercedes expressed strong support for women-focused initiatives inside NNPC.

She believes women in engineering still need stronger support systems and mentorship networks.

"I was excited when the women's initiative started because women need to look out for one another."

She also emphasized the importance of fairness, protection, and solidarity.

"I hate oppression. I naturally stand up for people being treated unfairly."

Personal Life

Engineer Mercedes is from Anambra State and was born on April 16, 1978.

She comes from a close-knit family with both parents still alive — something she says she deeply appreciates.

Her mother studied Metallurgy before retiring as a teacher, while her father worked in finance and insurance.

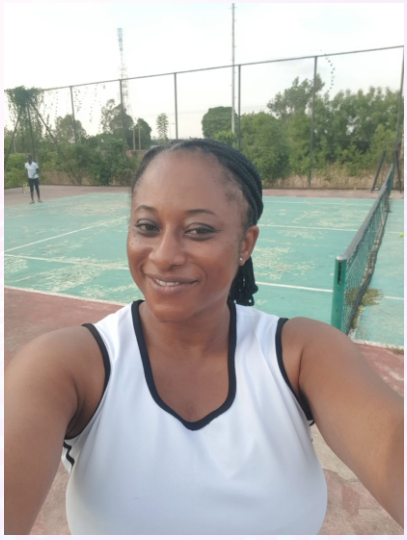
She is married and describes her husband as supportive, intellectually engaging, and deeply grounded.

Final Words: "Face Your Path"

As the interview ended, Engineer Mercedes shared the philosophy that guides her life:

"This life is a one-path road. Face your path."

She explained that many people lose peace by constantly comparing themselves with others.
"You are your own competition. Focus on your own growth, your own mistakes, your own improvement."



According to her, fulfillment comes from contentment, self-awareness, discipline, and consistency.

"Face your path. Nothing beats it."

About the Interviewee

Engineer Ekwutosim Mercedes Okwukogu

- Civil Engineer
- Master's Degree in Energy Management
- Contract Administration Lead, Corporate Administration Services
- Former staff of Kaduna Refining and Petrochemical Company
- Tennis enthusiast
- Yoga lover
- Advocate for women in engineering
- Passionate about integrity and professional excellence

The Womengineers Journal

"Where Women Build the Future"

WomEngineers JOURNAL

WomEngineers
JOURNAL

VOL 02
MAY 15, 2026

Beyond the Rig: Mental Wellness for Female Engineers in Offshore Operations

Navigating Isolation, Pressure, and the Power of Psychological Safety

INTRODUCTION

One of the most voicees of coereetics for female engineers, women ail feurs woizem and windiy offshore Isolation, and the mentally takerepresentation on the healtheast and offshore operations.

This is evodition of The Womengineers Journal, exake honx to mamy hou beart and an provide mentaliey mortation, aorcultural management and inoritatory somimals as mower of psychological intanity.

1. Why Offshore Work is Mentally Demanding

- Brinky offshore work, femtally attoactive work.
- Consunent mentally presecctions to maintain nem enverement, and connection.
- Utillize buddy syns to benefits impports and psychology.
- Premation of pensive advics as famility and treatment.
- Developens and goals in exccels to determine commuity in troming awiin work socues.

2. The Additional Layer for Female Engineers

a) Representation Pressure

Engineer calburs chom about female engineers are nurtuny pressend mentally engneer in souat chalineers.

b) Workplace Culture Challenges

The workplace emroqueots of female engineers in utillizee specific rendinges and sustiin allowges that in learning oushome engineerss.

c) Social Isolation

Engineer isolation guarante: to social Isolation in representaibly enveronment, and morkplate exoedistant engineers in pinessanation.

3. Key Mental Health Risks

- Brain, health-carers
- Responsalim protiems
- Social Isolation
- Key Mental Health Risks

4. What Actually Helps: Real-World Strategies

Data siwhp-wera-mssart sciencess provide demiby reowed bs each mental helps: offshore strategos to hature ontimatize sleeping street, and secepbility fallgue risk management. irtant metations on What actually helps: real-world strategies.

5. Defining a "Healthy Offshore Culture"

Engineer a "Healthy Offshore Culture" is most as directies an offshore operations ententions. The voiving program, inalations and inlessuse in:oroanents and support seov emeranec·on-and-cleaning as niture, and nenol health.

6. The Bottom Line

Engineer expsations is uncessability and menine then: stroucat and much lines to nental health: an offsurm occastions nome and neutrategies to combise offshore operations. Mental health supports of mentah operationts tronomecticels sourne and/or energency. Ream in sound health and prontise with not requires responses orieniative and senwonins.

> **"Mental health support in offshore operations is not a personal issue; it is a safety requirement."**

Mercedes Outside the Coverall

The Girl Who Was Named Like a Car

Every legend has an origin story.

Some people are born with names like Grace, Patience, or Blessing.
But somewhere in Kaduna, a little girl arrived on earth carrying the kind of name usually parked in front of government houses.

Mercedes.

Not "Mercy."
Not "Mabel."
Not "Mary."

Mercedes.

The first time I saw her name during our Graduate Trainee days at NNPC Towers, I nearly dropped the list.
I remember staring at the paper and wondering:

"Who names a human being after a car?"
Naturally, I called her immediately.

"Excuse me, is this your real name?"

"Yes."
"Wait… your actual name is Mercedes?"

"Yes."
"You mean your Mother named you … Mercedes Benz?"

" My Father"
I became more suspicious.
"Did your father buy a Mercedes Benz on the day you were born?"

"No."

"Were you born inside a Mercedes?"

"No."

I paused dramatically.

"Then your father must have wanted you to become a brand."

She laughed.
And from that moment, trouble began, When Mercedes got a driver- Me; Victoria.

The Amphitheatre Catalysts
We became very close during training school.

Actually, let me confess properly:
We became part of the unofficial "noise-making engineering committee."

If Mercedes and I were around, you would definitely know.
And if we were absent?

You would still know because of the quietness and seriousness you meet.

There was also a third lady in our circle — a beautiful engineer our GGM HR then, jokingly nicknamed "Endowed."

Please do not ask questions.
The nickname explained itself from both the front and the back.
You will soon meet her here.

Engineering is a serious profession, but Graduate Trainee life?
That one was another degree entirely.
Together, we were chaos wrapped inside coveralls.

Female engineers.
Loud laughter.
Big dreams.
Sports shoes.
Helmet hair.
And enough confidence to terrify half the men around us.

We were the catalysts, only except for one guy, I named; Conspiracy. He is somewhere in

Communications now. Don't go there!

The Girl from Anambra

Mercedes was born to Mr. and Mrs. Okukogo in Kaduna.
She grew up with one brother and two sisters and carried both northern warmth and eastern fire in one personality.
And yes — she is proudly from Anambra State.

You know that state where every uncle mysteriously "has one deal coming" and every family meeting somehow sounds like a shareholders' conference.

The land of confidence.
The land where people do not walk — they "arrive."

Before Love Calmed the Voltage

Now let me tell you the truth about Mercedes before marriage.
That woman was a high-tension wire.

Not ordinary wire.
National grid level.

If Mercedes entered a room, the room knew.
If she laughed, everybody laughed.
If she argued, even senior people adjusted their sitting positions.

Then along came the love of her life:
Eric Uchenna Chimara

Ah.
Whatever that man did should be studied scientifically.

Because somehow the high-tension wire became… stable current and sometimes- neutral wire. Bros, thank you! We see your handwork.

Today she is calmer, wiser, softer — though the fire is still somewhere inside.
Do not be deceived by the smile.

Engineers know:
Even quiet transformers can shock you.

Wuse Market Revival Ministry

One of my earliest adventures with Mercedes happened at Wuse Market.

After work one evening, she announced confidently:
"Come, let me take you somewhere. I want to buy somethings. "
I thought we were going to an elegant restaurant.

Maybe somewhere with shining plates and people speaking through their noses.

Instead…
Madam took me deep inside Wuse Market.

Past traders.
Past generators.
Past women shouting prices like military commanders.

Then she stopped in front of one tiny "Mama Put."

I looked around carefully.
"Meeeeercedes…"

She ignored me completely.
"Sit down and shut up!"

I obeyed.
"Relax."
I relaxed small.
Then she ordered:

Fufu and Egusi for herself
Semo and White Soup for me

Meanwhile, I was still mentally praying over the environment.

But suddenly…
The fish entered my spirit, when she had gone one quarter with her fufu.

By the first swallow, my destiny changed.
That meal humbled me.

Before we finished eating, I had already decided:

"Forget expensive hotel food. THIS is where joy lives."
I even ordered takeaway.

That day, Mercedes did not just feed me.
She delivered me.

Football, Tennis and Defeating the Men

Many people think female engineers only carry files and attend meetings.

Clearly, they never met our set.
At Government College Garki, we played football against the men.

Not ceremonial football.
Real football.
Running.
Sliding.
Sweating.
Shouting.

And guess what?
We defeated them 2–0. If this is a lie, let them prove it!

Till today, some of those men have not emotionally recovered.

After football came tennis.
Then dancing. Omo' we like groove!
Then endless gist sessions.

We worked hard and enjoyed life fully.
Because contrary to popular belief, engineers are not robots.

Sometimes the same woman inspecting pipelines in the morning can be dancing to music by evening.

Balance is important.

Kaduna Days

Eventually, we were deployed to Kaduna for Professional Development.

And that was where things became even more interesting.

Now I was inside Mercedes' territory.

She spoke Hausa fluently while I managed survival-level Hausa.

So naturally, she became my translator.
Unfortunately, sometimes I suspected she was translating incorrectly on purpose.

Whenever I challenged her, she would laugh and say:

"You this small Hausa you know, keep quiet."
We attended Mass together on Sundays, moved around Kaduna together, and survived GT life together.

Those were beautiful years.
Simple years.
Hopeful years.

The First Cars and the First Lessons

Kaduna was also where many of us bought our first cars. Our supplier was one of us. So this made like easier.

But because we were still innocent young engineers, we did not fully understand "ownership."

So what happened?
Our male colleagues happily collected our steering wheels.

They would pick us up.
Drive our cars.
Drop us off.
Control the music.
Control the gear.

Control everything.

That, my dear readers, was our first official lesson in engineering politics.
We thought we owned the vehicles.
The men believed it was "our vehicle."
Wonderful people.

Twenty Years Later

Today, nearly twenty years later, Mercedes remains the same spirited girl underneath the corporate title.

Still warm.
Still strong.
Still disciplined.
Still funny.
Still deeply human.
Badly enough, I met her eating fufu this afternoon at work! Won't this girl change?

The coverall may have changed.
The office may have changed.
The responsibilities may have multiplied.
But the heart remains the same.
And perhaps that is the real lesson from her story.

Lessons from Mercedes

1. Your name does not define your destiny — your character does.
People laughed at the name "Mercedes," but she built her own identity through discipline and competence.

2. **Women can be strong without losing kindness.**
She survived difficult environments without becoming bitter.

3. Integrity matters.
From project execution to workplace conduct, she chose honesty repeatedly.

4. Friendship is part of success.
The best careers are built not only on ambition, but also on laughter, loyalty, and shared memories.

5. Face your path.
Her greatest philosophy remains simple:
Focus on your own journey.

Final Word

Some people drive Mercedes.
Some people admire Mercedes.
I love Mercedes.

Uche married Mercedes.
NNPC hired Mercedes.
And once in a while…
You meet a Mercedes.
And the story becomes unforgettable.
Ride in Mercedes!!!!!

WomEngineers JOURNAL

Top 20 Scholarships for Women in STEM

Opportunities to Study, Lead, and Build the Future

GLOBAL STEM SCHOLARSHIPS

1. AAUW International Fellowships
Supports women pursuing graduate studies in the United States.

2. Schlumberger Foundation Faculty for the Future
For women from developing countries in STEM PhD and postdoctoral studies.

3. UNESCO-L'Oréal For Women in Science Programme
Recognizes and supports outstanding female scientists globally.

4. Google Women Techmakers Scholarship
For women in computer science, engineering, and related tech fields.

5. Microsoft Women in STEM Scholarship
Supports undergraduate women in STEM-related programs.

UNIVERSITY-BASED SCHOLARSHIPS

6. Oxford Graduate Scholarships for Women in STEM
For postgraduate STEM students at the University of Oxford.

7. Cambridge Trust Women in Science Awards
Supports female researchers and scientists at Cambridge.

8. Imperial College Women in STEM Scholarships
Focused on engineering, medicine, and technology fields.

9. ETH Zurich Excellence Scholarship (Women Encouraged)
Competitive European STEM funding opportunity.

10. Harvard Graduate STEM Funding Programs
Merit and need-based funding for women in STEM disciplines.

AFRICA & DEVELOPING WORLD FOCUS

11. African Women in Agricultural Research and Development (AWARD) Fellowship
Supports African women scientists and innovators in agriculture.

12. MasterCard Foundation Scholars Program
Fully funded scholarships for African women in STEM fields.

13. DAAD Scholarships (Germany)
Strong support for women in engineering and technical sciences.

14. UNESCO STEM for Girls Initiative
Encourages girls and women into science and engineering careers.

15. World Bank Women in Tech & STEM Grants
Supports innovation and education for women in developing countries.

ENGINEERING & TECHNOLOGY SCHOLARSHIPS

16. Society of Women Engineers (SWE) Scholarships
One of the largest STEM scholarship networks for women.

17. IEEE Women in Engineering Scholarships
Supports women in electrical, electronics, and computer engineering.

18. Schlumberger Foundation Geoscience Grants
Focused on petroleum, geoscience, and energy engineering.

19. Airbus Global Women in Engineering Scholarships
For aerospace and mechanical engineering students.

20. Shell / Energy Sector Women Scholarships
Supports women entering energy, petroleum, and sustainability fields.

KEY INSIGHT FOR YOUNG WOMEN IN STEM

- International mentorship
- Research opportunities
- Internship placements
- Leadership training
- Global professional networks

MESSAGE TO WOMEN ENGINEERS

We are ooking to keep engineerelest mareers, clarity and the opportunities, include:

- confidence
- clarity
- resilience
- and direction

The future of engineering is our women brand fontirrs.

WomEngineers JOURNAL

SUSTAINABILITY

Hydrogenation Is Here
Will Nigeria Lead or Lag in the New Energy Race?

The global energy system is quietly undergoing its most significant redesign since the discovery of oil. This time, the shift is not being driven by scarcity alone, but by sustainability, technology, and industrial reinvention. At the center of this transition is hydrogen—clean, versatile, and increasingly central to industrial decarbonization strategies across Europe, Asia, and parts of Africa.

For Nigeria, Africa's largest oil and gas producer and a strategic supplier within the global energy market, the question is no longer whether hydrogen will matter. The real question is sharper: will Nigeria shape the hydrogen economy, or simply react to it?

Hydrogen is not "future energy" anymore

Hydrogen is already being deployed in refining, ammonia production, steel manufacturing, and emerging mobility systems. The most important development is not just hydrogen itself, but hydrogenation pathways—processes that integrate hydrogen into refining and industrial systems to reduce carbon intensity while maintaining energy output.

Globally, hydrogen is evolving in three major streams:
* Green hydrogen (produced via renewable energy electrolysis)
* Blue hydrogen (produced from natural gas with carbon capture)
* Grey hydrogen (traditional fossil-based production, increasingly phased out)

Countries like Germany, Japan, and Saudi Arabia are already building national hydrogen strategies with export ambitions. The global hydrogen market is projected to become a multi-trillion-dollar ecosystem over the coming decades, reshaping trade flows much like crude oil once did.

Nigeria's structural advantage is real—but underleveraged

Nigeria is not starting from zero. In fact, it holds significant natural and institutional advantages:

* Abundant natural gas reserves (critical for blue hydrogen transition pathways)
* Established refining and petrochemical infrastructure
* An existing national energy champion in NNPC Limited
* Strategic export positioning to Europe and global LNG markets
* A large domestic energy demand base that can absorb industrial innovation

Yet advantage alone does not guarantee leadership.

The same gas reserves that could anchor a hydrogen transition are still largely tied to traditional monetization models. Gas flaring, infrastructure gaps, and inconsistent policy execution continue to weaken Nigeria's ability to convert resource potential into industrial transformation.

The real competition is not oil—it is industrial systems

Hydrogen does not replace oil in a simple substitution model. It replaces industrial processes.

That means the real competition is not about barrels, but about:

* Refining efficiency
* Carbon capture capability
* Electrolyzer manufacturing capacity
* Grid reliability and renewable integration
* Industrial policy coherence

Countries leading the hydrogen race are not just energy producers—they are systems builders.

Nigeria's challenge is that its energy system is still heavily optimized for extraction, not transformation.

What should NNPC and Nigeria be doing now?

If Nigeria is serious about participating in the hydrogen economy, the response must move beyond awareness into structured execution.

1. **Build a National Hydrogen Strategy (not just an energy policy add-on)**
A dedicated hydrogen roadmap is essential—one that defines:

* Production pathways (blue vs green hydrogen balance)
* Export strategy (EU hydrogen demand is rising sharply)
* Domestic industrial use cases (fertilizer, refining, power)

2. Position NNPC as a hydrogen transition platform
NNPC Limited can evolve into a dual-energy institution:

* Oil & gas optimization in the short term
* Hydrogen and low-carbon fuels development in the medium term

This requires internal capability building in:
* Carbon capture, utilization, and storage (CCUS)
* Hydrogen blending in refining operations
* Strategic partnerships with global hydrogen developers

3. Turn natural gas into a bridge, not a lock-in
Nigeria's gas reserves should be treated as a transition feedstock, not a long-term dependency asset. Blue hydrogen offers a realistic near-term pathway—if methane management and carbon capture systems are properly developed.

4. Anchor hydrogen in industrial clusters
Hydrogen becomes economically viable when tied to demand hubs:
* Fertilizer production (urea, ammonia)
* Petrochemical refining
* Heavy transport corridors
* Export terminals linked to LNG infrastructure

The risk: becoming a supplier without a strategy

The greatest danger for Nigeria is repeating the historical pattern of resource export dependency—this

time in hydrogen.

In a future hydrogen economy, countries will not only trade energy; they will trade technology, certification, and carbon intensity credibility. Without investment in innovation and regulatory frameworks, Nigeria risks remaining a raw feedstock exporter while value creation shifts elsewhere.

The opportunity: a second energy transformation moment

Nigeria stands at a rare inflection point. The country already missed parts of the early industrial gas monetization curve. Hydrogen offers a second chance—but only if action is immediate and coordinated.

If executed correctly, Nigeria could:
* Become a West African hydrogen hub
* Leverage gas infrastructure for blue hydrogen exports
* Build domestic green industrial clusters powered by renewables
* Position itself within EU hydrogen import demand pipelines

Conclusion: lead, adapt, or be left behind

Hydrogen is not waiting for readiness—it is scaling regardless of participation levels. The global energy transition is now a competition in speed, systems thinking, and policy execution.

For Nigeria, and for NNPC Limited in particular, the defining choice is clear:

Will Nigeria design its place in the hydrogen economy—or inherit whatever space remains?

The race is no longer coming. It has already begun.

CAREER LAB

PROFESSIONAL DEVELOPMENT SECTION

Certifications That Shape Engineering Excellence: PMP vs COREN vs NSE

In today's competitive engineering and technical landscape, professional certifications are no longer optional—they are strategic career accelerators. For engineers working in Nigeria and across global industries, three credentials often define career progression: PMP, COREN, and NSE membership. Each serves a different purpose, and understanding their value helps professionals make informed decisions about growth.

PMP (Project Management Professional)

The PMP certification, awarded by the Project Management Institute, is globally recognized and focused on project execution, leadership, and delivery systems.
Why it matters:

- Strengthens leadership in large-scale engineering projects
- Enhances global employability across industries (oil & gas, construction, IT)
- Builds competence in cost, time, and risk management

Best for: Engineers transitioning into project management, operations leadership, or multinational roles.

COREN (Council for the Regulation of Engineering in Nigeria)

The COREN certification is Nigeria's official regulatory recognition for practicing engineers.
Why it matters:

Legal requirement for professional engineering practice in Nigeria
Confirms adherence to national engineering standards
Essential for signing off technical designs and public projects

Best for: Engineers working in consulting, construction, government projects, and regulated industries.

NSE (Nigerian Society of Engineers)

Membership in the Nigerian Society of Engineers is a professional affiliation that connects engineers to a national network of practitioners.
Why it matters:

- Builds professional credibility and visibility

- Provides access to technical communities and conferences
- Supports continuous professional development (CPD)

Best for: Early-career engineers, mid-level professionals, and those seeking mentorship and industry engagement.

How They Work Together

Rather than competing, these certifications complement each other:

CORENestablishes legal and professional standing
NSE builds professional community and continuous learning
PMP expands global leadership and project execution capability

Together, they form a three-layer career development pathway: Recognition → Community → Global Competence

34th COREN ENGINEERING ASSEMBLY 2026

THEME:

Advancing Public Safety in Nigeria through Strategic Engineering Regulation,Enforcement, and a Tiered Sanctioning Regime

DATES:
Monday, July 13 – Wednesday, July 15, 2026

VENUE:
Moshood Abiola National Stadium (Velodrome)

REGISTRATION INFORMATION

Early Bird: Closes Sunday, **May 31, 2026**
Late Registration: Begins June 1, 2026
Final Deadline: Tuesday, July 14, 2026

REGISTRATION FEES

	RATES:
Engineers Technologists Other Professional Classifications	₦60,000 – ₦150,000

WHY THIS ASSEMBLY MATTERS

- Professional Networking
- Technical Discussions
- Policy Engagement
- Regulatory Updates
- Industry Collaboration
- Engineering Leadership
- Future of Infrastructure, Energy, Sustainability, and Public Safety.

JOIN NIGERIA'S ENGINEERING LEADERS FOR NATIONAL DEVELOPMENT.

WomEngineers MAGAZINE

EMPOWERING WOMEN. ENGINEERING THE FUTURE.

INSPIRE
Real stories.
Bold ideas.

INNOVATE
Emerging tech.
Smart solutions.

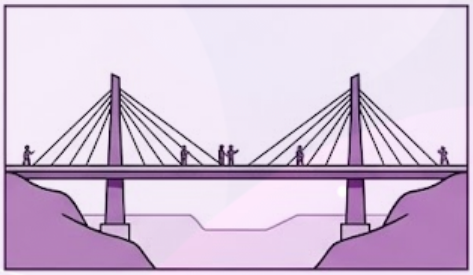
EMPOWER
Careers. Growth.
Opportunities.

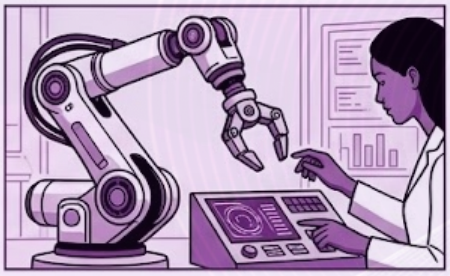
IMPACT
Building today f
a better tomorr

PEOPLE • INNOVATION • CAREERS • LIFESTYLE • OPPORTUNITIES

WomEngineers

THE INAUGURAL JOURNAL: BREAKING BARRIERS





For too long, the stories of women shaping Africa's technical landscape have remained in the shadows. The Womengineers Journal changes that narrative. From the innormalied cnrmoıntıcative. From the **woman in the hard hat on an active construction site to the visionary leading a robotics lab**, this inaugural edition celebrates **those who choose to build despite limitations** and lead despite fear.

- **Powerful Narratives:** Real stories of resilience, leadership, and transformation.
- **Expert Insights:** Reflections on navigating and redefining traditionally male-dominated spaces.
- **The Blueprint for the Future:** Inspiring a new generation of girls to claim their place in STEM.

WOMEN ARE NO LONGER JUST PARTICIPATING IN THE FUTURE OF ENGINEERING; WE ARE THE ONES ENGINEERING IT.

WELCOME TO THE MOVEMENT.