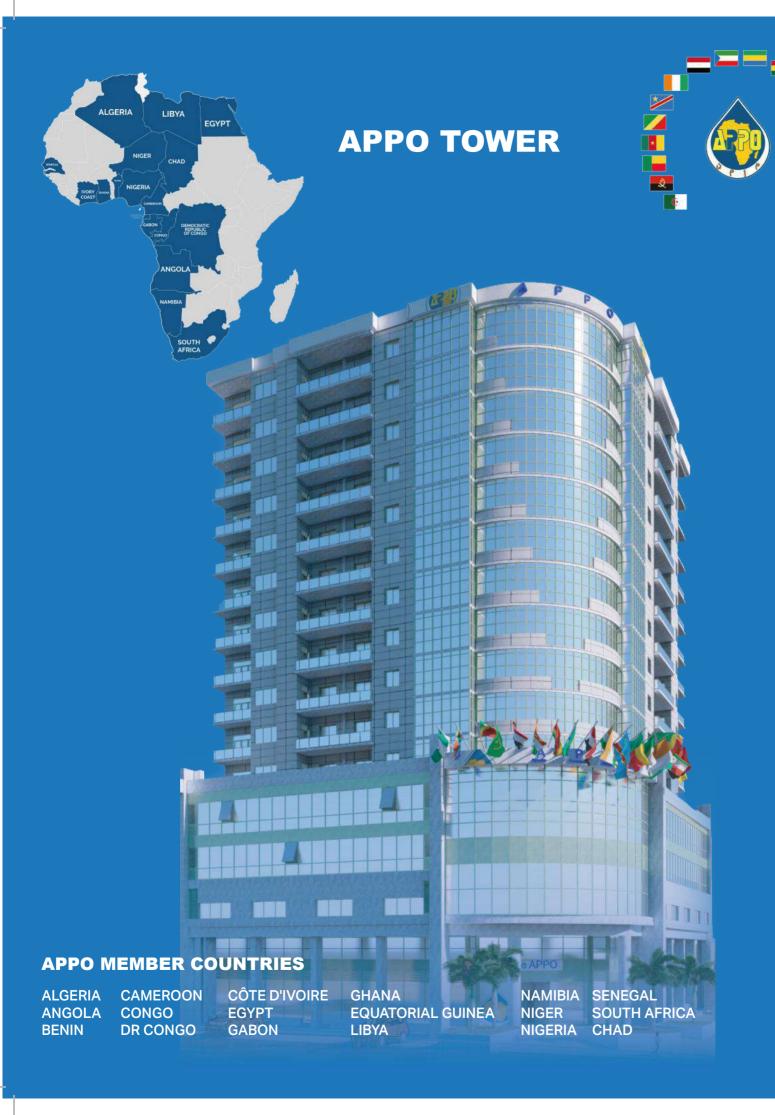
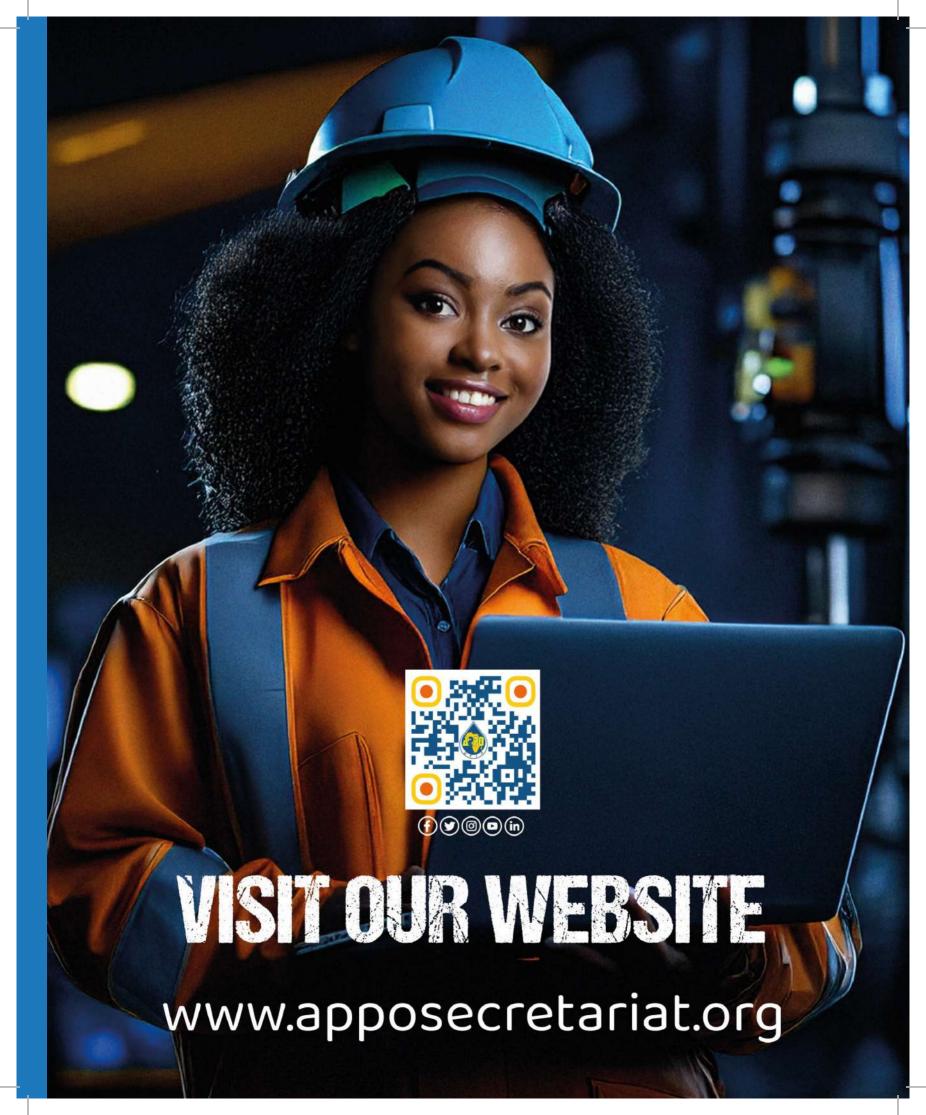
APPO Magazine







EDITORIAL

Towards the African OTC



Dr Omar Farouk Ibrahim SG of APPO

he Off-Shore Technology Conference, OTC, held annually in Houston, Texas, since 1969 attracts thousands of African oil and gas industry players - policy makers including Ministers and top civil servants, operators including CEOs of NOCs and Regulatory bodies, other captains of the industry, energy researchers and journalists. At each OTC, special sessions are dedicated to African oil and gas issues.

The beauty of the OTC is that it is a truly one-stop conference where the best of every aspect of the oil and gas industry is there for all to see. The well-researched technical papers that are presented and the intellectually stimulating conversations around the industry enough attractions

to the OTC. But more attractive is the fact that OTC provides a platform for the display of the latest technological developments in the industry. Exhibitors always have something new to show about the breakthroughs the industry has made since the last OTC.

On the African continent, Energy Conferences have become popular with almost every oil and gas producing country having several oil and gas conferences a year. While APPO appreciates the various groups that organize energy conferences on the continent, cognizant of their contributions to raising awareness about and attracting investment to the industry, we are also concerned about the value addition of some of these conferences, especially when it is realized that the target delegates, speakers, exhibitors are the same. Our Mi-

In the last two years, the Secretariat has worked assiduously with some of the key energy event players on the continent to address these concerns. We are agreed on having energy conferences that go beyond talk-shops and the exhibition of technologies that are not developed in Africa. We want to replicate OTC, Houston, where talks are matched by innovations made on the African continent. APPO will encourage and support national and regional conferences. But we aim to establish a truly inclusive and continental





nisters and NOC CEOs need to be allowed to find the time to do the work they are there to do. Our NOCs and other exhibitors need to have the time to focus on growing the industry.

These concerns informed the decision of the APPO Ministerial Council to ask that energy conferences on the continent be systematized such that there are no clashes in dates of conferences or set them too close the each other. Preferably, according to the Council, the various event organizers should pool resources to organize a truly Pan-African energy event. It should be noted that OTC in Houston is not organized by one firm but a group of 15 firms committed to development of the oil and gas industry.

energy event where participants will always see something new each year. And this event shall rotate across the various sub-regions of the continent. APPO has maintained that the solution to the imminent challenges that the global Energy Transition poses to the African oil and gas industry lies in greater cooperation and collaboration not in unhealthy competition and dissipation of our limited resources.

We commend the Board and management of African Energy Chamber, organizers of the African Energy Week as well as Sankofa Limited, the owners and organizers of the Africa Oil Week for their understanding and commitment for the cause of the African energy industry.



S U M

Publisher

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Visit the APPO website for the latest news and information about the Organization.

We are also available on Twitter, Facebook, Instagram, LinkedIn and YouTube.

Composition and objectives Of APPO

The African Petroleum Producers' Organization (APPO) is an intergovernmental organization, established by eight African countries on January 27, 1987 in Lagos, Federal Republic of Nigeria to serve as a platform for cooperation and harmonization of efforts, collaboration, sharing of knowledge and expertise among African oil-producing countries. Its mission is to promote hydrocarbon cooperation of its Member Countries and other global institutions to foster fruitful collaboration and partnerships while using oil as a catalyst for energy security, sustainable development, and economic diversification in Africa. APPO aspires to be the global reference and the leading institution on hydrocarbon-related issues in Africa. Today, the Organization is composed of 18 Member Countries: Algeria, Angola, Benin, Cameroon, Congo, Democratic Republic of Congo, Côte d'Ivoire, Egypt, Equatorial Guinea, Gabon, Ghana, Libya, Namibia, Niger, Nigeria, Senegal, South Africa and Chad. The Bolivarian Republic of Venezuela is an Honorary Member of APPO.

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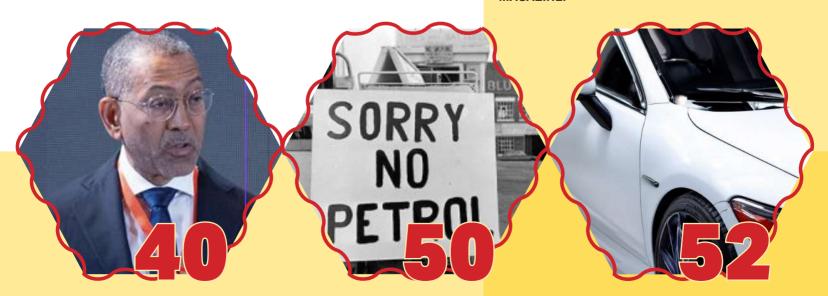
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Cover

The cover of this issue shows the photo of Mrs. Teresa Isabel Nnang Avomo, CEO of GEPetrol at the 6th Meeting of the APPO NOC CEOs Forum, on 24 September 2024 in Malabo, during which she took the reins of the Forum (See article on page 20).

SEE ALSO OUR CULTURAL SUPPLEMENT: CULTURAL PIPELINE, IN THE MIDDLE OF THE MAGAZINE.



45th Session of the Ministerial Council of APPO Gives Nigeria Hosting Right for Africa Energy Bank

The 45th extraordinary session of the Ministerial Council of APPO held virtually on Thursday, 4th July, 2024 selected Abuja, Nigeria, to host the Headquarters of the Africa Energy Bank, AEB. The session was chaired by H.E. Bruno Jean Richard Itoua, Minister of Hydrocarbons of the Republic of Congo, and Vice-President of the Council of Ministers.



Minister H.E. Bruno Jean Richard Itoua chairing the 45th Session of the Council of

he Ministerial Council of APPO met (virtual) for its 45th Extraordinary Session on 4th July 2024. The single agenda item of the Extraordinary Session was the selection of the headquarters country to house the Africa Energy Bank. Seven APPO Member Countries had expressed interest in hosting the Bank. These were Algeria, Benin, Cote d'Ivoire, Egypt, Ghana, Nigeria and South Africa. Egypt withdrew its bids. A High Powered Selection Committee comprising Ministers of some countries that had not expressed interest in hosting the Headquarters was set up. These were the Ministers of Angola, Libya, Senegal and APPO Honorary

Member Country, Venezuela. Objective criteria were established to evaluate the bids. These included socio-economic factors like accessibility, security, economic development, commitment to the Bank, evidenced in the payment of allotted share capital etc. The Committee, which was chaired by Libya's Minister of Oil and Gas evaluated the bidding criteria including sending technical teams to the various countries to inspect and report on the buildings proposed as headquarters. The Committee reviewed all the bids and submitted its report and recommendations to the Ministerial Council for consideration and decision.



Prioritizing the interest of the industry

In his opening remarks, H.E. Bruno Jean Richard Itoua commended all the countries that expressed interest in hosting the Headquarters for their commitment to the cause of the Organization, noting that irrespective of where the Headquarters is located, the interest of the industry and of

the funding challenge that African oil and gas industry has come to face as a result of the Energy Transition, where the traditional financiers of the world's oil and gas industry have resolved to abandon the industry, especially in Africa. The AEB when all Member Countries shall be paramount in the work of the

Bank, He further commended **Member Countries that have** already started paying their subscriptions to the share capital of the Bank, saving that it is the best expression of confidence in the project and assured that **AEB** the shall serve the best interest o f

Haytham-Afrexim...

INTERPRETE

BENIN-MEEM

Minister of Energy...

Nigeria the hosting right. The AEB is an international financial institution being established jointly by

APPO and Afreximbank with the aim of addressing

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Africa.

The APPO President, while congratulating Nigeria for getting the hosting right of the AEB, urged the country to ensure that all the necessary facilities are provided for the timely and effective take-off of

the Bank. Responding to the decision of the Ministerial Council, Nigeria's Minister of State for Petroleum Resources, Oil), Senator Heineken Lokpobiri assured the Council that Nigeria shall exceed their expectations. He expressed appreciation to his colleagues for the unanimity in the decision to give

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Venezuela - Ro

similar to other specialized development finance institutions and shall focus on providing funds for energy projects on the African continent. Although its focus shall be the oil and gas industry, the Bank shall be open to investments in all other forms of energy, including renewables.

The 18th Ordinary Meeting of Executive Board of APPO in Brazzaville

The 18th Ordinary Meeting of the Executive Board of APPO was held on July 10 and 11, 2024 in Kintélé in Republic of Congo. Sixteen Member Countries out of the eighteen, including fourteen in person, were in attendance.

he 18th Ordinary Meeting of the Executive Board of APPO was preceded by two days of preparatory meetings. Thus, the APPO Long-Term Strategy Committee, the Executive Board Audit Committee, the Executive Board Budget and Finance Committee as well as the Forum of Legal Focal Points held their meeting and presented their reports to the plenary. A strategic and brainstorming session to evaluate the performance of the organization since the reform from APPA to APPO was held. The session focused the preparedness of the Secretariat to tackle the identified challenges posed by Global Energy Transition to the African oil and gas industry. This session had in attendance experts in oil and gas, one of who played a key role, as President of APPA, in the reform from APPA to APPO, His Excellency Professor Emmanuel Ibe Kachwikwu, former Minister of State for Petroleum Resources of the Federal Republic of Nigeria. Professor Kachikwu was appointed by the APPA Ministerial Council to lead the APPA reform. Another expert resource person was Dr. NJ Ayuk, Executive Chairman of the African Energy Chamber, organizers of the African Energy Week. Finally, the retreat benefitted from the wealth of experience of Professor Olubayi Olubayi, change management experts and Chairman of the Board, Cavendish University, Uganda.

Important decisions to be submitted to the next Ministerial Concil

The opening ceremony was presided over by H.E. Mr. Bruno Jean Richard Itoua, Minister of Hydrocarbons of the Republic of Congo and Alternate President of APPO. In his address, Minister Itoua expressed the appreciation of the Council of Ministers to the Executive Board for the excellent work that it has accomplished over the last two years, and which has made it possible to change the face of the APPO. In particular, he congratu-

lated the APPO Secretariat and AEICorp, under the leadership of the Executive Board, for the execution of the mandate of the Council of Ministers to negotiate with Afreximbank the creation of the Africa Energy Bank. Minister ITOUA also welcomed all the other initiatives undertaken by the APPO with the aim of finding practical solutions to the challenges posed by the Energy Transition, with particular emphasis on the establishment of the Africa Energy Bank, the guest for centers of excellence in oil and gas across the continent, and the efforts to realize the Central Africa Pipeline System, CAPS, a project jointly promoted by APPO and the Central Africa Business Energy Forum, CABEF, which Minister Itoua played a key role in its conceptualization. Minister Itoua urged the Board to continue to work in harmony with the Secretariat so that APPO shall continue to excel. He commended the Secretary General, whose wealth of experience in international energy relations, have laid a solid foundation for post-reform APPO.

Mitigating the challenges of the ET

In his remarks, Dr. Omar Farouk Ibrahim, Secretary General of APPO expressed appreciation to Minister Itoua for the continued support and guidance he has been receiving form the Minister, saying that on many occasions he has had to run to the Minister to have some issued resolved. He commended the Ministerial Council for the support and trust reposed in the Secretariat under his leadership. He particularly expressed appreciation to the ministerial Council for its preparedness to support innovate ways of running the Secretariat. The Secretary General also commended the Executive Board for its constant support and guidance to the Secretariat. Noted that the cordial relationship that exists between the Board and the Secretariat accounts for the success that the Organization has recorded so far.

He said that, from his experience, first as member of the management staff of OPEC and later as OPEC Governor and Executive Board Member at the GECF, the surest way to make progress in running international organizations is to ensure there is trust and harmony between the Secretariat and the Board. This experience has been his guiding principle in running the Secretariat since he assumed office in 2020. He then recalled the major challenges posed by the Energy Transition to the oil and gas industry in Africa and the concrete actions undertaken by APPO to address them. These are the financing of oil and gas projects, the acquisition and mastery of oil and gas technology and expertise, and the latest challenge of oil and gas markets and infrastructure. The SG referred to the efforts to establish the Africa Energy Bank, create regional centers of excellence in various sectors of industry and set up a comprehensive energy pipeline system in Central Africa, the Central Africa Pipeline System, CAPS, which shall link 11 Central African states by crude, products and gas pipelines, thus effectively paving the way for regional and eventually continental energy market development.

Agenda of the Meeting

Turning to the agenda of the meeting, the Chairman of the Executive Board and EB Member for the Republic of Congo, Mr. Stev Simplice Onanga informed the meeting that they were gathered in Kintele to review the performene of the Secretariat for the first half of the year, and provide guidance to the Secretariat as it prepares its Work Programme and Budget for 2025. He also expressed his gratitude and that of the Members of the Executive Board to His Excellency Minister Bruno Jean Richard Itoua, for the unparalleled support that APPO has received from him and that of the Republic of Congo and welcomed the conducive working atmosphere created by His Excellency the Minister for the holding of the Board meetings.

Achievements of the APPO Secretariat

The APPO Secretariat presented its book of reports, including an update on the level of implementation of Ministerial Resolutions 302 to 320, an update on the implementation of the Decisions of the 16th EB Meeting and the Secretariat's Work Program for 2024 and the related budget. It approved the updated SIP and the recommendations of the APPO Long-Term Strategy Committee, an updated report of which will be submitted to the next Executive Board meeting. From a legal point of view, the recommendations of the Forum of Legal Focal Points aimed at modifying certain provisions of the Statutory Documents were presented. The Board endorsed the proposed amendments and decided to submit them to the next Session of the Ministerial Council for consideration and approval. Having reviewed developments at the Africa Energy Investment Corporation, AEICorp, the Board decided to have a professional audit firm to audit the finances and governance of APPA Fund and AEICorp since 2015. The Board directed the Secretariat and AEICorp to continue with their efforts to see the effective take-off of the Africa Energy Bank. Finally, The Executive Board agreed to reconvene (via videoconference) on Thursday, July 18, 2024 to discuss matters related to the AEICorp. Board also decided that its next Ordinary Meeting will take place in Yaoundé on October 30, 2024 as a prelude to the 46th Ordinary Session of the Ministerial Council scheduled for November 1, 2024.

2024 STATUTORY MEETINGS

The 19th Ordinary Meeting of the APPO Executive review of the APPO's Work Programme and Budget Several items are planned on its agenda, including the preparations for the take-off of the Africa Energy Bank.

Board will take place on October 30, 2024, as a prelude for 2025. On Tuesday, October 29th, the Meeting of the to the 46th Ordinary Session of the Council of Minis- APPO Long-Term Strategy Committee will take place. ters, scheduled for November 1, 2024 in Yaoundé, Ca- The 19th Ordinary Meeting of the Executive Board will meroon. This Meeting of the Executive Board will be start on Wednesday, October 30th with a Plenary Sespreceded on Monday, October 28, 2024, by the Mee-sion. The opening ceremony shall be presided over ting of the Executive Board Audit Committee (EBAC), by H.E. Mr. Adolphe Moudiki, CEO of the National Hywhose members are: Cameroon (Chair), Equatorial drocarbons Company of Cameroon (SNH), and Pleni-Guinea and South Africa. It will be an opportunity to potentiary of Cameroon to the Council of Ministers of take stock of the conclusions of the last EBAC meeting APPO and President of the APPO Ministerial Council. and to consider the External Auditor's Report for 2023. The meeting will consider and adopt the Reports of The Meeting of the Budget & Finance Committee the Secretary General as well as the Reports of the va-(B&FC) of the Executive Council (Egypt - Chair, Ango- rious Board Committees and the Long Term Strategy la and Benin) is also scheduled for the same Monday. Committee. The meeting shall also deliberate on the

Venezuela renews its commitment to APPO

The new Ambassador of the Bolivarian Republic of Venezuela in the Republic of Congo, Her Excellency Mrs. Laura Suarez, paid a courtesy visit to the APPO Secretariat on July 31 2024 where she was received by His Excellency Dr. Omar Farouk Ibrahim, Secretary General.



The delegation of Venezuela received by APPO's SG

enezuela did not become an Honorary Member of APPO for the sake of form, but rather with a view to forging closer relations between Africa and the South American continent. This is the meaning to be given to the courtesy visit paid by Her Excellency Ambassador Laura Suarez to the Secretary General of APPO in Brazzaville. Very honored by this visit, Dr. Omar Farouk Ibrahim did not fail to salute, from the outset, the exemplary collaboration between Venezuela and APPO. Referring to the challenges facing the African continent because of the Energy Transition, he presented to the Ambassador the various solutions that APPO is pursuing. Thus, regarding the challenge of financing the oil and gas industry in Africa, Dr. Farouk

presented to the Ambassador an update on the progress on the establishment of the Africa Energy Bank. On the technology challenge, he noted that APPO is working to set up centers of excellence, while the organization and CABEF are promoting the Central Africa Pipeline System, CAPS to address the market and market infrastructure challenge. The Secretary General of APPO also stressed that instead of Africans lamenting the challenges that energy transition poses to their oil and gas industry, they should look at the opportunities it is providing to them to finally use the energy that they have been producing to lift Africans out of energy poverty. He called for a strengthened partnership between APPO and Venezuela.

Venezuelans, but Africans

The Ambassador, for her part, expressed her gratitude to APPO for the new initiatives it has introduced for Africa to take ownership and control of its energy resources. She particularly congratulated APPO for the creation of the Africa Energy Park

Bank, which she said will be a ga-APPO's mission omote coope of hydrocarbor mber Coun global insti' ritful coll partnership etroleum? for energy ble develo economic d ica.

LAURA EVANGELIA SUÁREZ's Profile

Laura Evangelia Suárez was born in Caucagua, Miranda State, Bolivarian Republic of Venezuela, on December 27, 1971. She holds a Master's Degree in Venezuelan Foreign Policy from the «Pedro Gual» Institute of Advanced Diplomatic Studies, Caracas, Bolivarian Republic of Venezuela. She is an International Master in the Processes of Migration, Diversity and Intercultural Integration, graduated from the International Institute of Global Studies for Human Deve-

me-changer for the African continent and its people, especially in this period of Energy Transition. « We are Venezuelans, but we are Africans » said H.E. Mrs Laura Suarez, recalling Comandante Hugo Chavez's legacy of freedom and affection for the African continent. She assured the Secretary General that Venezuela is ready to provide all possible support to assist APPO in its efforts to strengthen its oil and gas industry, noting that Venezuela is one of the first countries to discover and start producing oil, and that it has the world's largest oil reserves. The Ambassador also conveyed a message from Venezuela's Minister of Hydrocarbons, H.E. Pedro Rafael Tellechea, to the Secretary General, assuring APPO of Venezuela's willingness

to share its many years of experience in the oil and gas industry with APPO. It was agreed that a bipartite commission will soon be set up, between the Ministry of Hydrocarbons of Venezuela and APPO, to work on a roadmap to govern the cooperation between the Venezuela and APPO. It would be recalled that the Bolivarian Republic of Venezuela was admitted as the first, and so far, the only non-African country to be an Honorary Member of APPO since 2021.

Their Excellencies Mrs. Laura Suarez and Dr Omar Farouk Ibrahim

lopment, Kingdom of Spain 2021. She also holds a degree in International Studies from the Universidad Central de Venezuela in 2006. A career diplomat with the rank of Advisor to the People's Ministry of Foreign Affairs, she was a Middle East specialist in the Office of the Vice Minister for Asia, Middle East and Oceania of the Ministry of People's Power for Foreign Affairs between 2022 and 2024, Director General of the Bureau of Integration and International Affairs and Director of Cooperation Mechanisms of the Ministry of People's Power for Water Attention, in 2021. Laura Evangelia Suárez held positions in the Legal Council of the Ministry of People's Power for Foreign Affairs in 2020. She is the author of numerous publications including « Haiti in the middle of the labyrinth: Assassination of President Jovenel Moïse », July 2023 and « Building a new Bolivarian diplomacy with a gender perspective », November 2023.

MC Visit and AEB Road Show

Republic of Tchad

A delegation of APPO led by the Secretary General, Dr. Omar Farouk Ibrahim, paid, from August 19 to 20, 2024, a visit to APPO Member Country, the Republic of Chad. This trip is part of the equity-fund Mobilization Campaign and the sensitization for the ratification of the founding Documents of the Africa Energy Bank, AEB.

he Secretary General and his delegation were granted an audience by H.E. Ndolenodji Alixe Naïmbaye, Minister of Oil, Mines and Geology of the Republic of Chad. The discussions focused on the Africa Energy Bank and its opportunities in terms of financing the oil and gas sector in APPO Member Countries. After a briefing on the processes that led to the decision to create the Bank, the SG welcomed the commitment of Member Countries to make it a success. He noted that for too long, Africans have been made to believe that their salvation as a people lies in the help they get from others, and that they cannot make the difference to their own lives without relying on the outside world. For him, no one outside Africa has the interest of Africa and its people at heart more than Africans, "The continent is ours to make or

to mar. For our own sake and for the sake of our children and future generations, we should commit to a new paradigm shift on the way to Africa's future. We have to seriously begin to look within for the solutions to our challenges", added him. He finished by saying that investing in the Africa Energy Bank is not a charity. It is a business that shall bring Chad, and other APPO Member Countries, a lot of cash dividends as well as influence. He therefore invited Chad to commit to membership by signing the Establishment Agreement and the Charter and pay all or part of its allotted shares of the subscriptions. Minister Naimbaye congratulated APPO for its foresight in establishing the Bank and assured that Chad will speedily commit to paying its shares and ratifying the Establishment Agreement.



The delegation posing with the Chadian Minister of Oil, Mines and Geology H.E. Ndolenodji Alixe Naïmbaye



Working session at the SHT: APPO's SG and the CEO of the SHT Mrs. Djalila Abdourahim

The delegation next called on Mrs. Djalila Abdoura- ral of the Chadian National Oil Company, SHT. A briefing was given to the DG and her team on the him, Director Forum of APPO NOC CEOs, including its aims Gene and objectives as well as structure and decision making processes. The SG used the opportunity to invite the new DG to the next meeting of NOC CEOs scheduled for September 24, 2024 in Malabo. Responding, Mrs. Abdoulrahim welcomed this commendable initiative. She assured the APPO team of the SHT's availability to work alongside them to carry out this large-scale project. Mrs. Djalila Abdoulrahim stressed that this initiative corresponds to the vision of the SHT and the Government, aimed at making energy a promising and fundamental sector for the development of the country. SHT was also invited to subscribe to the capital of the

AEB.

APPO's SG with the Chadian Minister of Oil, Mines and Geology

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MC Visit and AEB Road Show

Republic of Niger

A delegation of APPO led by the Secretary General, Dr. Omar Farouk Ibrahim, paid, from August 22 to 24, 2024, a visit to APPO Member Country, the Republic of Niger, in the framework of the equity-fund Mobilization Campaign and the sensitization for the ratification of the founding Documents of the Africa Energy Bank, AEB.

he APPO delegation was the very first delegation received by His Excellency Dr. Sahabi Oumarou, after his appointment which was announced barely 48 hours earlier. The Petroleum Minister and his team received a briefing from the Secretary General of APPO, Dr. Omar Farouk Ibrahim on their mission to Niger. Noting that the Minister had just been appointed to the ministry, the Secretary General briefed the Minister about APPO, its mission, vision, organizational and decision making structures. He also used the opportunity to brief him on the upcoming Ministerial Council Session scheduled to take place in Yaounde, Cameroon on 1st November 2024. Turning to the main mission of the delegation, the Secretary General informed the Minister that the Africa Energy Bank is multilateral, supranational financial institution being established jointly by APPO and Afreximbank in response to the imminent challenges that energy transition poses to the African oil and gas in-

African oil and gas producing countries had relied on foreign financing for their oil and gas projects. That source of funding is coming to an end because of energy transition. It therefore becomes impera-

tive that Africa looks for

dustry. He noted that for several decades

alternative sources of funding if it is to continue to benefit from the abundant resources endowed to it by God. He told the Minister that the Bank was conceptualized two years ago, and that by July 2024, the Establishment Agreement had been signed by the founding institutions, a Member Country had signed and ratified the Establishment Agreement, A host Country had been selected, 45% of the required share capital for the take-off of the Bank has been sourced and paid.

artunity to brief him al Council Session acounde, Cameroon ning to the main ne Secretary art that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the main ne Secretary are that the ateral, with a council Session acounded to the council Session acounded to t



The delegation received by His Excellency Dr. Sahabi Oumarou, Petroleum Minister of the Republic of Niger

He told the Minster that a lot of interest is being shown by the investment community in the Bank. He appealed to the Minister to give priority to Niger paying its allotted share of the capital of the Bank.

Pooling resources together to end poverty

The SG noted that with the decision of the countries on whom African oil industry has depended for funds for their oil and gas projects to abandon hydrocarbons, particularly in Africa, the leaders of the continent have no choice but to look within to raise the required funds to sustain and grow the industry. Failing that Africa will be forced to declare as stranded assets the over 125 billion barrels of proven crude oil reserves and over 650 trillion cubic feet of natural gas, at a time that Africa has the largest proportion of its population living in energy poverty. He added that African countries need to pool their resources together to get end energy poverty. Responding, Minister Oumarou said that he fully shared APPO's

vision of the future of the oil and gas industry in Africa and assured that the matter is already receiving the attention of the government. At the National Oil Company of Nigeria, SONIDEP, the CEO, Ali Seibou Hassane expressed appreciation for the innovations taking place in APPO, noting in particular the establishment of the Forum of CEOs of APPO NOCs, the Forum of Directors of Research and Development as well as that of Training Institutions. He assured of SONIDEP's participation in the next meeting of the Forum of CEOs scheduled to take place in Malabo, Equatorial Guinea on 24th September 2024. The APPO SG's delegation included Mr. Zakaria Dosso, MD of AEICorp, the financial arm of APPO, Eng. Bakary Traoré, Head of the Office of the SG, Mr. Kalu Abosi and Mrs AARONI Iver consultants to APPO on the project. The Minister's team at the audience comprised the Secretary General of the Ministry of Petroleum, Dr Eng Amadou Hamidou Abdoulaye and the Executive Board Member Mr. Salissou Musa Diakité.

Strengthening Energy Sector Synergies The Visit of APPO's SG to Honourable Heineken Lokpobiri, Minister of State for Petroleum Resources, Nigeria

n August 28, 2024, His Excellency Dr. Omar Farouk Ibrahim, the Secretary General of the African Petroleum Producers' Organization (APPO), paid an official visit to His Excellency Senator Heineken Lokpobiri, the Honourable Minister of State for Petroleum Resources, Federal Republic of Nigeria. This visit was part of ongoing efforts to review the readiness of the Nigerian government for the forthcoming launch of the Africa Energy Bank (AEB), scheduled for early 2025. The visit was aimed at assessing the progress made in the structural and operational preparations for the launch of the Africa Energy Bank. The AEB is a critical initiative designed to support and enhance the financing of energy projects across the African continent. The discussions focused on ensuring that all necessary frameworks and documentation are in place to meet the ambitious timeline for the bank's launch.

Nigeria secured the hosting rights for the Africa Energy Bank (AEB) after a highly competitive process involving three other APPO Member Countries — Ghana, Benin, and Algeria. Egypt, South Africa, and Côte d'Ivoire had earlier withdrawn their bids. The decision followed deliberations on the report of the AEB Headquarters Ministerial Selection Committee, established by the APPO Ministerial Council under the chairmanship of Mohamed Oun, Minister of Libya, with the Ministers of Angola, Senegal, and Venezuela as members. Welcoming the Secretary General, Minister Lokpobiri stressed that key to Nigeria's success was the strong backing from President Bola Tinubu and the vision presented by the Nigerian delegation, highlighting the country's commitment to addressing the continent's energy funding challenges and supporting the Energy Transition.



Working session



His Excellency Senator Heineken Lokpobiri, the Honourable Minister of State for Petroleum Resources, Federal Republic of Nigeria

Key Highlights of the Meeting

Review of Preparations: H.E. Dr. Farouk reviewed the various elements involved in the launch of the Africa Energy Bank, including making the headquarters building ready for occupation, finalizing the Host Country Agreement, and Signing and Ratifying the Establishment Agreement of the Bank. He expressed satisfaction with the progress made so far and acknowledged the commitment of the Nigerian government in driving this initiative forward.

Reassurance from the Minister: H.E. Senator Heineken Lokpobiri reassured Dr. Ibrahim that all critical aspects of the AEB's establishment are being diligently addressed. He emphasized the Nigerian government's dedication to meeting the launch target and highlighted the collaborative efforts between various stakeholders to ensure the success of the project.

Commendation of APPO Leadership: Senator Lokpobiri took the opportunity to commend Dr. Ibrahim and his team for their exceptional leadership in steering APPO towards significant achievements. He acknowledged the Secretary General's visionary leadership, which has positioned APPO as a key player in the continent's energy sector.

Senator Lokpobiri expressed confidence in Dr. Ibrahim's ability to continue guiding APPO towards even greater successes.

Observations and Feedback

Progress Evaluation: The review highlighted that substantial progress has been made in the preparatory phase of the Africa Energy Bank. However, both parties agreed on the importance of maintaining the current momentum to meet the stipulated launch date.

Collaborative Efforts: The discussions underscored the importance of continued collaboration between APPO, the Nigerian government, and other stakeholders involved in the AEB project. The mutual understanding and cooperation among these entities are critical to the successful launch and operation of the bank.

Leadership and Vision: The visit reaffirmed the critical role of leadership and vision in driving initiatives like the AEB. The commendations from Senator Lokpobiri further validated the significant strides made by APPO under Dr. Omar Farouk Ibrahim's leadership, which have contributed to the broader development of the African energy sector.

The visit of Dr. Omar Farouk Ibrahim to Senator Heineken Lokpobiri marks a significant milestone in the journey towards the establishment of the Africa Energy Bank. The positive outcomes of the meeting reflect the shared commitment of APPO and the Nigerian government to enhancing the continent's energy infrastructure. The Secretary General's visit not only provided valuable insights into the readiness for the AEB launch but also strengthened the partnership between APPO and Nigeria in achieving this common goal. APPO remains dedicated to working closely with all stakeholders to ensure that the Africa Energy Bank is successfully launched and positioned to make a lasting impact on the African energy landscape.

APPO NOC CEOs Forum

Mrs. Teresa Isabel Nnang Avomo, assumes leadership of the Forum for 2024-2025



Family photo

The CEOs of the NOC of APPO Member Countries met once again to critically examine the future of the Oil and Gas industry in Africa in the light of the challenges posed to the industry by the Global Energy Transition. The meeting which is the 6th in the series of Meetings of the Forum was hosted by the esteemed GEPetrol of Member Country, the Republic of Equatorial Guinea in Malabo. On this occasion, Mrs. Teresa Isabel Nnang Avomo, CEO of GEPetrol took over the reins of the Forum.

EOs and representatives of CEOs of the following NOCs were present at the meeting which took place on Tuesday 24 September 2024, at the International Conference Center in Malabo: SONATRACH (Algeria), SONANGOL (Angola), SNH-Benin (Benin), SNPC (Republic of Congo), PETRO-CI (Côte d'Ivoire), GEPETROL & SONAGAS (Equatorial Guinea), GOC (Gabon), GNPC (Ghana), NOC (Libya), SONIDEP (Niger), NNPC Ltd (Nigeria), SFF (South Africa), PETROSEN

(Senegal) and SHT (Chad). The meeting was preceded by a tour of gas facilities and other attractions in Malabo on 23 September.

Deciding Africa's fate in Africa

The meeting was a solemn moment of strengthening the commitments of all parties to support common efforts for an endogenous development of the continent's oil and gas wealth.

Speaking in his welcome address, the SG of APPO, Dr. Omar Farouk Ibrahim said that the future of Africa lies in collaboration, not in cut throat competition between NOC, For him, there is no better forum for the common challenges facing the industry on the continent to be discussed and solutions proferred than the Forum of NOC CEOs. Further speaking on common challenges, the Secretary General called on Africa to present common positions at COP29, scheduled to be held in Baku, Azerbaijan in November 2024. He strongly advised that African NOC should critically review the implications of the application of the European Carbon Border Adjustment Mechanism tax (CBAM) on the economies of Africa and in particular the African oil and gas industry. He emphasized that the salvation of Africa lies with Africans cooperating and collaborating, not with reliance on outsiders. To finish, Dr Farouk commended NOC that had hearkened to the call of the 5th Forum in Brazzavile and had paid some of their allotted shares in the capital of the Africa Energy Bank, AEB.

From SNPC to GEPetrol

Like the APPO Ministerial Council, the Forum of APPO NOC CEOs' leadership is held by rotation. However, unlike the Ministerial Council where the out-going President hosts the meeting, at the NOC Forum it is the incoming President that hosts the meeting. In his Presidential remarks, Mr. Maixent Raoul Ominga, out-going President of the Forum and CEO of the SNPC-Congo, recalled the decisions taken at the Brazzaville meeting of the Forum and highlighted the progress made in executing those decisions. He commended his colleagues for their positive response to the plea to fund the AEB, their positive response to the creation of the APPO Technical Experts Committee, APPO TEC. He commended the Secretariat for the professionalism of its work and the support given to the office of the President during his tenure. For him, the vision of the SNPC he leads is clear: to continue to contribute to the development of Congo and continue to collaborate with APPO's sister companies in order to improve the industry. He then passed the torch of the organization to Mrs. Teresa Isabel Nnang Avomo, CEO of GEPetrol. The latter, while rejoicing in the common history that the NOC continue to write together, said that the time when Africans expected assistance from the outside is over. Stressing the importance of cooperative work, she congratulated APPO for the progress and successes achieved thanks to the support of the NOC. The series of speeches was closed by the opening address delivered by H.E Antonio Oburu Ondo, Minister of Hydrocarbons and Mining Development of Equatorial Guinea. For the Minister, the CEO Forum is a major platform that will allow APPO to achieve its objectives. He also noted that the demand for energy is growing. He therefore invited the NOC to explore the best ways to cooperate for the benefit of the populations. He also highlighted the importance of collaboration and invited the participants to do everything possible to strengthen this partnership. Finally, returning to some major themes, such as the increase of Africa's LNG potential and the issue of decarbonization, he noted that the Forum offers a unique opportunity to meet these different challenges, and many others.

Partnering

In the framework of the implementation of the Cooperation and Mutual Assistance Framework Agreement (CMAFA) between APPO Member Countries, one Collaboration Agreement among NOC and two Memoranda of Understanding between APPO and Brevity Anderson and APPO and Hawilti Ltd were signed. These were a Memorandum of Understanding between SNPC of Congo and GNPC of Ghana, a Memorandum of Understanding on Fund Raising between APPO Secretariat and Brevity Anderson and a Memorandum of Understanding on Gas Data Collection between APPO Secretariat and Hawilti Ltd. The working session was chaired by Mrs. Teresa Isabel Nnang Avomo, CEO of GEPetrol. The work focused on an update on the establishment of the Africa Energy Bank (AEB), other Major Funding Options for Oil and Gas Projects and Operations, infrastructure and Regional Markets, human Capacity Building and Expertise Development, technology for Oil and Gas Industry and environmental Matters. At the close of the Meeting, the APPO NOC CEOs agreed to have their 7th Meeting in Ghana, in August 2025, hosted by GNPC.

Taking control of data to rule the industry Brazzaville hosted the 2nd Workshop on the APPO Annual Questionnaire



The presidium at the opening of the proceedings

The Data Focal Representatives of APPO Member Countries were in conclave on August 13 and 14 2024 in Brazzaville, Republic of Congo. This meeting was part of the second workshop on the APPO Annual Questionnaire.

majority of APPO Member Countries were represented at the second workshop on the Annual Questionnaire, after the first, held via videoconference on March 7, 2024. The workshop was also attended by two emminent guests, namely Mr. Abdoulaye Oueddo, Administrator of the AFREC Data Bank and Dr. Adedapo Odulaja, Expert Consultant in Information and Data Systems and a former Head of Data Services Department at the OPEC Secretariat in Vienna. In his welcome speech, His Excellency Dr. Omar Farouk Ibrahim, Secretary General of

APPO highlighted the importance of data in decision-making in the oil and gas industry in Africa. In particular, he noted that without mastery of its energy data, Africa will not be able to meet the challenges posed by Energy Transition. This is why he highlighted the need to build and harmonize the energy data of Member Countries. He thanked the Data Focal Representatives for taking the time to be in Brazzaville and for the opportunity provided by their respective countries by appointing them as APPO Data Focal Representatives (DFR).



Addressing the challenge of data availability

For the SG, data is everyone's responsibility and speed in data acquisition is essential for its publication to help control the narrative and take control of the industry. For him, the challenge of data availability can be better met with patience, resilience, perseverance and commitment. He also briefed the Meeting on the history of the Organization, from its creation as APPA to the reform implemented to better address Africa's challenges the industry, which is largely articulated in the mission, vision and strategic objectives of the new APPO. The workshop was led by Dr. Taher Najah, Director of the Research Division the APPO Secretariat. Several modules were held on the key areas of data collection, namely macroeconomic statistics, energy statistics, upstream and downstream oil sector statistics, natural gas statistics, intermediate and infrastructure statistics, as well as data quality assessment and energy balance issues. The modules were led by both experts and managers from the APPO Secretariat Research Division. The very rich exchanges also focused on the issue of data collection at the national level as well as on the issue of methodologies and challenges in the management of energy data. The work packages consisted of exchanges between APPO DFR, consultants and the Secretariat with the aim of agreeing on the principles, conduct, responsibilities of the parties and the expected outcomes after the workshop.

Quality input from Experts

The expert from AFREC, Abdoulage Oueddo, shared AFREC's experiences in data collection highlighting the challenges they face and how they go about solving them. On his part, Dr. Odulaja Adedopo, for his part, gave an overview of the challenges related to data collection and management, as well as how to manage these problems. He stressed that responsibility for data quality concerns all actors, namely the APPO OCAL REPRESENTATIVES WORK Secretariat, the Data Focal FOCAUX DE DONNÉES DE L Representatives or other stakeholders, and that three determinants can help achieve this goal: completeness, accuracy and timeliness. At the end of the two-day workshop, the DFR reiterated their commitment to fill the annual questionnaire with the required data and return it as soon as possible. For the improvement of the quality of the questionnaire, the participants made several recommendations that did not fall on deaf ears, since at the end of the work, H.E. Dr. Omar Farouk Ibrahim, Secretary General of APPO, reassured of the relevance of the points raised, indicating that they will be addressed as far as possible by the Secretariat. Thus, he stressed the need for the Secretariat to develop a manual on the APPO questionnaire. Having received their certificates of participation from the hands of the SG, the par-

ticipants parted ways after expressing their satis-

faction with the way the meeting went.

The West Africa Energy Summit at Accra Unlocking Africa's Vast Energy Potentials

The West Africa Energy Summit took place in September 2024 at the Accra International Conference Centre in APPO Member Country, Ghana. Organized by OGV Group in partnership with the Ministry of Energy, the Ghana Petroleum Commission and the Ghana National Petroleum Corporation, the summit was attended by eminent personalities, including the Secretary General of APPO, His Excellency Dr Omar Farouk Ibrahim.

he West Africa Energy Summit, which was held from 3 to 5 September 2024, was a key moment of insightful exchanges around the future of the energy sector in West Africa. Important highlights marked the opening ceremony of this Summit. It was first the CEO of the GNPC, Mr. Joseph Abuabu Dadzie, who had the honor of welcoming the various delegations from West African countries and other countries in and outside the continent. He highlighted the many challenges facing the energy sector in the sub-region, and welcomed the holding of the Summit whose objective is to discuss these important issues. In turn, the Secretary of State for Energy of Ghana, Hon. John Kobina Sanie delivered a speech in which he welcomed the holding of the Summit, before

inviting the participants to make rich contributions, so that the conclusions of the Summit can induce a qualitative evolution for the energy industry in the sub-region. He then officially declared the Summit open.

Unlocking Africa's Potential

The opening ceremony was marked by a Fireside Chat on the theme «Unlocking Africa's Potential: The Monetization of Oil and Gas for Industrialization and Socio-Economic Development». Moderated by Mr. Pranav Joshi, Vice President – Upstream, Rystad Energy, the session featured H.E. Dr. Omar Farouk Ibrahim, Secretary General of APPO and Mr. Rashid Ali Abdallah, Executive Director of AFREC.



APPO SG (middle) participating in Fireside Chat



As a member of this high-level panel, the SG of APPO presented the actions and position of APPO on the subject under discussion. His speeches, which were greeted with loud applause from the audience, highlighted the various changes that the Organization has undergone since its creation in 1987, as well as the various solutions proposed to meet the challenges of unlocking Africa's energy potentials. Thus, he indicated that in response to the challenges posed by the Energy Transition, APPO has conducted a study that has highlighted the challenges facing Africa. These are the challenges of financing, infrastructure and markets. The SG said that it is not up to the same people who led humanity to the current ecological catastrophe to impose their agenda on Africa, Also, he added that Africa must be able to give itself the means to continue the exploitation of its natural resources, especially oil and gas, to lift its one billion population who have no access to modern energy. Speaking on the progress made by the APPO towards addressing the imminent challenges that Energy Transition pose to the African oil and gas industry, Dr. Farouk gave the conference an update on the establishment of the Africa Energy Bank, saying that the Establishment Agreement was signed on 3 June 2024 and a decision on the Headquarters of the Bank was taken on 4 July 2024. He also spoke about APPO's drive to have regional centers of oil and gas excellence across the continent, and its efforts to develop regional energy markets through creating the required energy infrastructure. He cited the example of the CAPS, Central Africa Pipeline System, which is planned to link 11 Central African states by comprehensive crude, products and gas pipelines. He concluded by saying that it is only through a synergy of actions and means that Africa can effectively unlock its potential to industrialize and develop.

Africa's Energy Sovereignty

The opening ceremony concluded with the inaugural address by the Former President of Nigeria His Excellency Olusegun Obasanjo, on the theme «Energy Sovereignty of Africa». He noted that while the world benefits from the historic extraction of African resources for industrialization, Africa itself has vet to benefit from its vast endowment of natural resources. While many countries are rushing to net zero after benefiting from the continent's resources, Africa remains a low carbon emitter, accounting for 3% of global emissions. His Excellency Olusegun Obasanjo then presented his views on why Africa can and will continue to harness fossil fuels for its economic development and energy security needs. The opening ceremony concluded with an awards session, including to former Presidents, Their Excellencies John Agyekum Kufuor of Ghana and Olusegun Obasanjo of Nigeria. The Summit was a real meeting of exchange, with rich and lively panels, an exhibition in the colors of major companies and organizations in the energy sector in West Africa. It concluded with a day of networking golf that offered participants an opportunity to network in a relaxed atmosphere.



Inaugural address by the Former President of Nigeria His Excellency Olusegun Obasanjo



Angola Oil & Gas 2024

Increase investment to raise hydrocarbon production

The 5th Edition of the Angola Oil & Gas (AOG) Conference and Exhibition took place in Luanda, Angola, on October 2 – 3, 2024. These two days of exchange and networking made it possible to lay the foundations of the energy future of Angola, an beautiful APPO Member Country.



Family photo with H.E. President João Lourenço,
President of the Republic of Angola

s a symbol of support at the highest level for the hydrocarbon industry in Angola, H.E. President João Lourenço was present in person to formally open the Angola Oil & Gas 2024. This 5th edition of Angola's flagship Conference and Exhibition was launched on October 2 in Luanda in the presence of some Ministers from APPO Member Countries, H.E. Aimé Sakombi Molendo (DR Congo), H.E. Mamadou Sangafowa Coulibaly (Côte d'Ivoire), H.E. Mr. Kornelia Shilunga (Vice-Minister of Energy of Namibia) and H.E. Diamantino Azevedo (Angola) as well as H.E. Dr Omar Farouk Ibrahim, SG of APPO. The meeting was opened with rallying calls

from industry leaders and major operators to increase investment and boost hydrocarbon production. The country's stated objective is to keep crude production above one million barrels per day (bpd) beyond 2027. As a result, the conference called for seizing the opportunities created by recent regulatory reforms to move projects forward. In his opening address to the Conference, H.E. President João Lourenço of Angola called on industry to increase investment in oil and gas. He especially insisted on aspects related to sustainable development and the unexplored potential of the national hydrocarbon industry.



The SG of APPO (far right), during the ministerial panel

Bridging borders

After the opening ceremony, the APPO SG was part of an insightful Ministerial Panel on "Bridging Boarders: leveraging oil and gas and gas sector to advance regional trade". Reflecting on ways to unlock the potential of trade and foster regional integration, this ministerial roundtable brought together government leaders and policymakers to discuss current plans and innovative approaches to continue to drive trade and regional integration for the benefit of the entire oil and gas value chain. In response to this issue, Dr. Farouk presented the joint initiative between APPO and Afreximbank to create the Africa Energy Bank as a solution to address the financial challenge that the Global Energy Transition poses to the industry in Africa. The discussion deepened the critical role of infrastructure development as a catalyst for seamless connectivity and increased economic synergies across borders.

Signing of important agreements

The Angolan Minister of Mineral Resources, Oil and Gas H.E. Diamantino Azevedo and the Minister of Hydrocarbons of the Democratic Republic of Congo (DRC), H.E. Aimé Sakombi Molendo

signed an agreement with new conditions for the co-development of Offshore Block 14, Common Interest Zone (ZIC). Straddling the maritime border between Angola and the DRC, Block 14 has a production capacity of 3.29 million barrels per year. The deepwater block is operated by Chevron's local subsidiary, the Cabinda Gulf Oil Company, alongside its partners Eni, etu energias and Angola's national oil company Sonangol. In addition, a second agreement between Angola and DRC was also signed to enhance cooperation in the areas of trade, business and investment. The agreement was formalized by Angolan Finance Minister Vera Esperança dos Santos Daves de Sousa and Congolese Finance Minister Nicolas Kazadi. It aims to promote innovation, financial standards and socio-economic development in both countries. All in all, through richly animated panels and intense discussions between national and international industry players, Angola Oil and Gas 2024 resonated as a strong moment of commitment by all parties to produce more energy with fewer emissions. Angola says it is more than ready for such a step. The country has undertaken regulatory reform and is clearly positioning itself in favor of future-oriented solutions for energy security and Energy Transition.

Al, a game-changer

Artificial Intelligence is rapidly transforming industries worldwide, and the oil and gas sector is no exception. This technology is proving to be a game-changer, offering unprecedented opportunities for efficiency, cost reduction, and innovation.

n June 2024 NVIDIA, a US based chipset and semi-conductor manufacturer, became briefly the most valuable company in the world ahead of the famous GAFAM (Google, Amazon, Facebook, Apple, Microsoft) and Saudi Aramco, the National Oil Company of Saudi Arabia. NVIDIA's success, which is strongly linked to the rise of Artificial Intelligence (AI), is mainly due to it's role as a pioneer and leader in the field of graphics processing units (GPUs). These chips, initially designed to improve the performance of video games, have proven to be indispensable tools for the development of Al. NVIDIA's success is indicative of the upheavals that AI has brought to the business world.

An umbrella term

Some years ago, before the big bang caused by the release of Chat-GPT in 2022, relevant studies had been conducted. Thus, in 2018, MarketsandMarkets, a worldwide market research platform, estimated that Al in Oil & Gas market was expected to grow from an estimated USD 1.57 Billion in 2017 to USD 2.85 Billion by 2022. This growth was attributed to factors such as the rising adoption of the big data technology, digitalization of the Oil & Gas industry and investments in Al-related startups.



Most Valuable company in the world thanks to Al



Still, in 2018, a report by Price Waterhouse Cooper (PwC) predicted that the use of digital technologies like AI in upstream operations could result in savings in capital and operating expenditures of between USD 100 billion to USD 1 trillion by 2025. AI has the potential to add value to businesses, increase employee capabilities and harness the power of man and machine to improve productivity and user experience. In reality, AI is an umbrella term for many technologies, a subset of which is machine learning, the most useful AI application yet. In machine learning, programmers give a computer millions of data related to a specific problem, then apply a series of algorithms to recognize patterns. The machine learns from the patterns and provides useful pre-

dictions or insights based on probability. The machine gets better as it goes along processing data. The potential benefits of Al, combined with IoT (Internet of Things) technologies that consist of multiple connected sensors on equipment and big data analytics, are unparalleled for the oil and gas sector.



Various uses of Al by the giants of the sector

Many of the algorithms behind Al and machine-learning systems are not new but limited volumes of accessible data have hampered their application. The recent explosion in data volumes and availability has led to a step change in the training of algorithms and provided important insights: easy access to vast data volumes is making Al algorithms smarter. Thus, major companies are pioneering AI in oil and gas exploration to overcome complex challenges, drive innovation, and set new industry standards. They are using Al in predictive maintenance to leverage technologies to forecast issues and predict failures before they arise and to reduce emissions footprint by reducing its fuel usage in LNG shipping. They are also using IoT technologies in their operations, leveraging autonomous drilling in deep water and for flare monitoring.

Expected benefits for the African oil and gas ecosystem

This is a huge opportunity for IOCs and African NOCs who desire to position themselves in this sector with complete autonomy, in the face of the challenges facing the continent. Al will support the efforts at exploiting the continent's immense resources, and utilizing its hydrocarbons to address the known challenges that Energy Transition poses to the African oil and gas industry (Funding, Technology and Markets). The expected benefits of using Al include increasing efficiency when we know that automation of routine tasks and optimization of processes

lead to signifiefficiency cant gains. Also, it can discounted be as costs reduction: by reducing operational costs, optimizing resource allocation, and preventing equipment failures, Al contributes substantial cost savings. It also improves safety, knowing that Al-powered sys-

tems can identify potential hazards and risks, leading to a safer work environment. Furthermore, Al can contribute to enhanced Decision Making, providing valuable insights and recommendations, enabling better decision making and sustainability, helping reduce the environmental impact of oil and gas operations by optimizing energy consumption and minimizing waste. However, while the potential benefits of Al in the oil and gas industry are immense, there are also challenges to overcome. These include data quality and accessibility, cybersecurity and talent acquisition. Despite these challenges, the oil and gas industry is embracing AI as a strategic imperative. By investing in research and development, building robust data infrastructure, and fostering a culture of innovation, African companies can unlock the full potential of Al and gain a competitive edge.

Critical Minerals *A golden opportunity for Africa*

Africa is sitting on a goldmine – literally. The continent boasts approximately 30% of the world's mineral reserves, many of which are critical to the burgeoning Green and Digital economies.

ritical minerals or strategic minerals or new economy minerals are metallic or non-metallic elements essential in modern technologies, Clean Energy and national security. They are characterized by their economic importance, supply chains at risk of disruption and limited availability of viable substitutes. The applications of critical minerals are vast and ever-expanding. Some of the most prominent include Energy Transition minerals like lithium, cobalt, manganese, and rare earth elements, essential for electric vehicle batteries, wind turbines, and solar panels. Electronics minerals such as Tin, Tungsten, and Tantalum (3T) are crucial for the production of smartphones, computers, and other electronic devices. Transportation sector minerals like platinum group metals (PGMs) or graphite are used in catalytic converters, aerospace components, and defense systems. Medical equipment and pharmaceuticals often rely on critical minerals, such as manganese alloys in the manufacture of surgical tools, and stainless steel or titanium alloys in medical prosthetics and dental tools, for their production. According to most analysts, the global demand for critical minerals is projected to soar, driven by accelerated push for clean energy technologies and electrification.

A treasure trove of Critical Minerals

Africa's role in global mineral production is substantial. Africa supplies about 80% of the world's platinum, 80% of the world's chromium, over 60% of the world's manganese, over 50% of the world's bauxite, Zimbabwe can meet about 20% of the world's lithium demand, the Democratic Republic of Congo (DRC) supplied over 43% of the world's tan-

talum and 70% of the world's cobalt in 2022. Despite its abundant mineral resources and significant production, Africa's mining sector faces an exploration and socioeconomic paradox. Many countries have an incomplete understanding of their mineral potential, and the sector contributes marginally to global GDP. The continent's share of global mining exploration spending and revenue remained notably low, at below 10% and 5%, respectively, in 2022 (R Campbell et al, 2023 White & Case).



Africa's potential and challenges

Africa has the potential to become a major player in the global critical minerals landscape. But realizing this potential requires a strategic approach. The continent needs to develop its entire value chain, from exploration and extraction to processing, manufacturing, enduse products and recycling. This will create jobs, generate revenue, and ensure that Africa benefits fully from its mineral wealth. However, challenges abound. Many African countries lack the necessary infrastructure, technology, and skilled workforce. Moreover, there are concerns about environmental and social impacts. To address these challenges, strong governance, sustainable practices, financial investment and investment in human capital are essential. According to a recent AfDB study, "Africa Economy Brief: Strengthening Africa's Role in the Battery and Electric Vehicle Value Chain" (J Ahadjie et al., 2023), the value in the battery supply chain alone has the potential to grow economic impact from \$11 billion USD to over \$7 trillion USD by 2025.

A Double-Edged Sword

Africa is undeniably endowed with a vast array of mineral resources. This geological wealth presents a sianificant opportunity for economic transformation and development. However, the continent's potential remains largely untapped, and its contribution to the economy is disproportionately low. Africa's critical mineral resources represent a once-in-a-lifetime opportunity. By adopting the right policies and making the necessary investments, the continent can transform its mineral wealth into sustainable economic growth and prosperity for its people and prevail the resource curse. Well-functioning institutions, sound policies, and effective regulatory frameworks are critical to achieving these goals. The goal of the Africa Mining Vision adopted in February 2009 by the African Union heads of state and government is to achieve "transparent, equitable, and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socioeconomic development."

Policy recommendations

We observe that new critical mineral policies and regulations are being drafted in many African countries, such as Botswana (2022), Ghana (2023), and Zimbabwe (2023). To maximize the benefits of its critical mineral resources, Africa needs a comprehensive policy framework embedded within the African Union Mining Vision (AMV).

This framework should focus on:

- Developing a comprehensive critical minerals strategy: This should guide exploration, extraction, and management practices.
- Implementing robust legislation and regulations: Clear frameworks are essential for governing mining, trade, and export.

- Establishing attractive fiscal policies: These should incentivize responsible mining and fair revenue sharing.
- Addressing resource nationalism: Policies should promote fair and sustainable resource management while balancing national interests.
- Investing in value chain development: Building a strong domestic minerals industry is crucial for job creation and economic growth.
- Supporting research, development, and innovation: Technological advancements will enhance the sector's competitiveness.
- Fast-tracking project approvals: Streamlined processes will accelerate mineral development.
- Promoting partnerships: Collaboration with international partners can boost investment and technology transfer.
- Prioritizing sustainability: Environmental and social responsibility must be core to all mining operations.

African Energy Week 2024

At a time when Africa's energy industry is facing many challenges, the African Energy Week conference serves as a platform for engagement, collaboration and investment. APPO is delighted to take an active part in this event as an Official Partner.



APPO's SG, H.E. Dr Omar Farouk Ibrahim at AEW 2023

he African Energy Chamber and the African Petroleum Producers' Organization, APPO, on January 16, 2024 renewed the Memorandum of Understanding for partnership for the organization of African Energy Week. This renewal follows the expiration of the first MoU, which covered the period 2021 to 2023. The new MoU, which covers the period from 2024 to 2028, provides for several joint activities during the conference. These include the organization of seminars and joint technical sessions during

the Week. These events aim to strengthen the capacities of APPO Member Countries as well as those of its NOC. APPO is also presenting an innovative stand at the event. This exhibition aims to highlight the decisive action of this pan-African organization through its ambitious mission to promote hydrocarbon of its Member Countries and other global institutions, to foster fruitful collaboration and partnerships while using oil as a catalyst for energy security, sustainable development and economic diversification in Africa.

Thus, this exhibition highlights the 18 Member Countries of the APPO: Algeria, Angola, Benin, Cameroon, Congo, Democratic Republic of Congo, Côte d'Ivoire, Egypt, Equatorial Guinea, Gabon, Ghana, Libya, Namibia, Niger, Nigeria, Senegal, South Africa and Chad. The flagship project of the implementation by APPO, in partnership with Afreximbank (another AEW Official Partner) of the African Energy Bank, is not to be outdone.

Investing in African energies

African Energy Week (AEW) is the African Energy Chamber's annual energy event, intiated since 2021, uniting African energy leaders, global investors and executives from across the public and private sector for four days of intense dialogue on the future of the African energy industry. The event, which is being held from 4 to 8 November 2024 in Cape Town, is under the theme: « Invest in African Energies: Energy Growth through an Enabling Environment, with a commitment to unlocking the full potential of Africa's oil and gas industry». The Week

aims to connect, once again, many African presidents, ministers and policymakers with regional and foreign investors. The event brings together the largest number of African ministers of energy and oil and is opened by African presidents. National Oil Companies from across the continent are leading the talks, while international energy and technology companies are coming to sign deals and join forces. The event brings together African stakeholders and global authorities, with energy heavyweights from the Middle East, Europe and Asia using AEW as a platform to engage and invest in African opportunities. AEW also showcases the most innovative and future-oriented companies, projects and solutions through the event's exhibit, while various investor-focused panel discussions, presentations, sessions and meetings provide stakeholders with the information they need to make informed investment decisions across the continent. With a focus on upstream investment and downstream revitalization, the event serves as an platform for Africa's energy sector, connecting industries and players and forging a future based on integration.

APPO's Side Event at AEW 2024

Funding of the Oil and Gas Industry The role that AEB is called upon to play

APPO is organizing a special sideline event during African Energy Week on the role that the Africa Energy Bank, AEB, is expected to play in financing the African Oil and Gas industry.

The Africa Energy Bank is Africa's practical response to the imminent funding challenges that the Global Energy Transition poses to the continent's oil and gas industry. Being established jointly by Afreximbank, APPO and its Member Countries, the AEB aims to fill the gap resulting from the decision of the traditional financiers of Africa's oil and gas projects to end funding oil and gas ostensibly due to climate concerns. For a continent with over 600 trillion cubic feet of proven gas reserves and over 125 billion oil reserves, at the same time having the world's

largest proportion of its population living without access to modern energy, abandoning oil and gas in the name of Energy Transiton is not on the cards. This is especially so, as this continent is also the least prepared, technologically, to materialize renewable energies, even when it has abundant renewable energy resources. The special sideline event on the AEB is meant to bring together high level policy and decision makers and investors, Ministers, CEOs of NOCs, and other strategic guests to hear more about the AEB, its objectives, its organizational and share holding structrure as well as its business model and business plan. The SG of APPO, Dr. Omar Farouk Ibrahim, will set the scene by presenting the background to the creation of the Bank. Presentations will be made and the floor shall be open for discussions.

3 questions to NJ Ayuk about AEW

APPO MAGAZINE (A.M.): What informed the establishment of the African Energy Week conference?

NJ Ayuk (NJ): African Energy Week (AEW) was established in response to the urgent need to address Africa's energy challenges and opportunities, particularly in the context of the continent's increasing demand for energy access, development and industrialization. AEW provides a platform for African governments, businesses and international stakeholders to come together and find African-led solutions to energy issues. The continent faces the dual challenge of meeting its growing energy needs, while also navigating international pressures to transition away from fossil fuels. AEW was founded to promote African energy independence, highlight investment opportunities and foster dialogue that balances the need for development with sustainability goals and takes place on the African continent.

A.M.: Having launched in 2021, AEW now returns for its fourth edition. How has the event impacted the African energy landscape over the years?

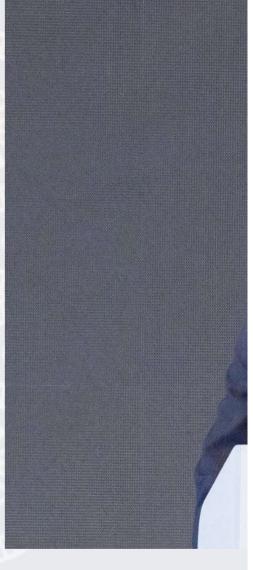
NJ: Since its inception in 2021, AEW has brought together global investors, project developers and African governments, facilitating major partnerships and investment commitments. AEW has served as a key forum for addressing the continent's energy poverty, with a strong focus on harnessing both fossil fuels and clean energy sources. This event has been instrumental in aligning Africa's energy policies with the continent's long-term development needs, promoting local content, driving infrastructure development and ensuring that African countries benefit directly from their natu-

ral resources. AEW has contributed to creating a more transparent attractive environment for energy investment. countries such as Nigeria, Angola and the Republic of Congo taking notable steps toward regulatory reforms and public-private partnerships that have strenathened the operating landscape for oil, gas, and renewable energy projects alike. This is reflected in this year's theme: Invest in African Energies - Energy Growth through an Enabling Environment.

A.M.: What is the outlook for AEW 2024? What should attendees expect from the African Ener-

gy Chamber – as the organizer of the event – for future editions, particularly in light of the number of similar events being held across the continent?

NJ: Looking ahead, AEW is set to continue playing a pivotal role in securing Africa's energy future. Across its activities, the Chamber aims to foster deeper regional collaboration,





encourage innovation and promote African-led energy solutions. With the growing number of energy events across the continent, AEW distinguishes itself by focusing on Africa's specific challenges and opportunities. Future editions will likely place greater emphasis on leveraging emerging technologies like green hydrogen and carbon capture, enhancing intra-African trade, and facilitating investments that are aligned with

Africa's energy sovereignty and industrialization goals. The Chamber is committed to ensuring that AEW remains the premier platform for advancing the energy agenda through pragmatic, Africa-centered strategies. AEW will continue to advocate for a balanced energy mix, supporting both fossil fuels and renewable energy as drivers of economic growth, while addressing the need for climate resilience and sustainability.

The African Energy Chamber Federating actions to optimize the reach of companies operating in the energy industry



The African Energy Chamber (AEC) was founded in 2018 to promote sustainable investments and best practices in the energy sector on the continent.

he African Energy Chamber brings together various stakeholders in this sector as well as regulatory authorities from around the world to discuss African issues and the impact of global issues on the continent's environmental energy trends. It also reflects on developing creative solutions to optimize operations and investments across the continent's energy value chain. The African Energy Chamber in partnership with the African Petroleum Producers' Organization, APPO, annually hosts the African

Energy Week (AEW), a four-day conference that brings together African energy leaders, international investors, and public and private sector experts to discuss the future of the energy sector on the continent. Created in 2021 with the aim of eradicating energy poverty by 2030, this event consists of an interactive conference and an exhibition. It hosts roundtables, investor forums, industry summits and one-on-one meeting opportunities and provides a framework for discussions to set African energy development on a new trajectory.

At the forefront of the African energy industry

The African Energy Chamber works to maintain a results-focused business environment for companies operating in Africa's dynamic energy sector. It works with indigenous companies throughout the continent in optimizing their reach and networks. Its partnerships with international dignitaries, executives and companies allow for relevant servicing to other international entities looking to operate within the continent. In doing so, the Chamber brings willing governments and credible businesses together to continuing growth of African energy sector under international standard business practices. In its view, by developing the energy sector through initiatives, African nations should focus on developing a natural gas market that will serve as the foundation for Africa's energy industry. In this regard, AEC focuses on establishing a strong domestic trading market.

Investment outreach

With Africa's investors basket constantly diversifying and expanding, the African Energy Chamber undertakes a year-long active investment outreach program to key regions such as Asia (India, China, Southeast Asia), Russia, the Middle East and North America. This investment outreach strategy is focuses on strategic and targeted working visits introducing Africa, its markets and investment opportunities to selected investors and companies. The Chamber is present across the continent's energy markets and is able

to gather key industry stakeholders around the issues and topics that shape the industry. The AEC collaborates with companies looking to enter or expand in Africa, providing information and internal contacts to ensure success. Building capacity in Africa's oil and gas sector, supporting the development of local content, and ensuring that industry growth leads to job creation are at the heart of the Chamber's mandate. Together with its partners, it frequently organizes workshops and training programs tailored to the needs of governments, national oil companies and the private sector on a wide range of topics, including technical, legal and financial capacity building.

Implementation of the policy

Together with its partners and network of experts in all areas of the oil and gas value chain, AEB supports the development and implementation of key policies and regulations that make Africa a better place to do business while ensuring that local businesses and communities benefit from the continent's natural resources. From the development of master plans for energy and gas to the implementation of local content strategies, the Chamber supports the public and private sectors in all their policy needs in Africa. In addition, it participates in the best international investment forums and conferences in Africa and beyond. Its partners benefit from exclusive discounts to attend such prestigious global events, take part in the conversations that shape Africa's future and find the right opportunities to grow their businesses.

A look back at the previous edition: AEW 2023

The theme of AEW 2023 was "The African Energy Renaissance: Prioritizing Energy Poverty, People, the Planet, Industrialization and Free Markets". AEW 2023 represented the largest gathering of energy stakeholders on the continent. At its core, the event served to promote investment in Africa's energy sector; offer a platform for African nations to address challenges associated with energy poverty and the Energy Transition; foster intra-African collaboration and trade; while developing new strategies for stimulating growth in Afri-

ca on the back of sustainable energy. It was inaugurated by Presidents Hage Geingob of Namibia, Macky Sall of Senegal and Yoweri Museveni of Uganda, as well as the respective Ministers of Energy and Petroleum of South Africa, South Sudan, Uganda, Equatorial Guinea, Congo-Brazzaville, Ghana, Mozambique and many others. Special sessions and panel discussions were also held during the Week, including a discussion moderated by Olusegun Obasanjo, former President of the Federal Republic of Nigeria.

South Africa A key player in the african energy landscape

South Africa plays a strategic role in African petroleum sector, primarily due to its geopolitical position, economic influence, and its involvement in energy infrastructure.

here are several key aspects of South Africa's role in African petroleum.

Energy Hub and Refining Capacity

Refining Infrastructure

South Africa has one of the most advanced refining capacities in Africa. Its refineries, like those in Durban, Cape Town, and Sasolburg, process both imported and locally produced crude oil. This makes South Africa a significant player in the downstream petroleum sector.

Petrochemicals

South Africa, through companies like Sasol,

is a leader in petrochemicals and synthetic fuel production, setting it apart as a technological innovator in Africa's petroleum value chain.

Oil Importer and Consumer

Import Dependency

South Africa is a major importer of crude oil, primarily due to limited domestic oil production. It imports crude from countries like Nigeria, Angola, and the Middle East, providing markets for oil-producing African nations.



Consumer Base

As one of Africa's largest economies, South Africa is a significant consumer of petroleum products, driving demand for oil across the continent and indirectly supporting production and trade.

Investment in African Oil Production

Energy Companies

South African companies, including state-owned PetroSA and private firms like Sasol and Engen, invest in oil exploration, production, and distribution in other African countries. This boosts intra-African investment in the energy sector.

Regional Partnerships

South Africa often collaborates with oil-rich nations in Africa, such as Angola and Nigeria, through trade agreements, joint ventures, and infrastructural development projects.

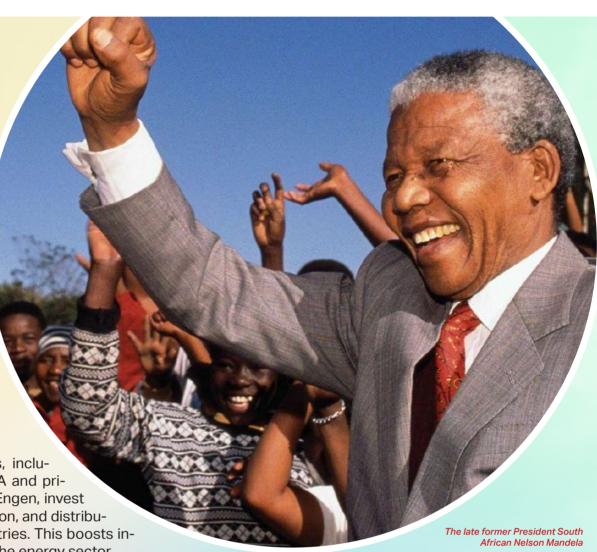
Energy Diplomacy and Influence

Diplomatic Influence

As a member of the BRICS bloc and with a strong diplomatic presence across Africa, South Africa plays a role in shaping policies related to energy, climate change, and sustainable development in Africa.

SADC Role

South Africa is a leading nation within the Southern African Development Community (SADC), and its energy policies significantly impact the energy security and trade of petroleum products across the southern African region.



Oil and Gas Exploration

Offshore Potential

South Africa itself has been exploring offshore oil and gas potential, particularly in the regions off the west and south coasts. While domestic production remains limited, discoveries of oil and gas could shift its role from an importer to a more active producer.

Renewable Energy Transition

Energy Diversification

South Africa's role in petroleum is also influenced by its broader energy policy, which includes diversification toward renewable energy sources. This positions South Africa as a leader in the continent's transition to sustainable energy, which could affect petroleum demand and supply strategies in the future. Overall, South Africa acts as a key strategic player in African petroleum, not just as an importer and refiner but also through investments, regional partnerships, and energy diplomacy that shape the broader African energy landscape.

H.E. Dr. Diamantino Pedro Azevedo, Minister of Mineral Resources, Oil and Gas of the Republic of Angola

The brand of a talented reformer

Appointed in 2017 as Minister of Mineral Resources, Oil and Gas (MIREM-PET) of the Republic of Angola, H.E. Dr. Diamantino Pedro Azevedo commands admiration for his unwavering commitment to the service of the oil and gas industry of his country, Africa and the world. Under his leadership, significant progress has been achieved, helping to consolidate Angola's position as a frontline player in the global oil and gas environment.

.E. Diamantino Pedro Azevedo, holds a PhD in Mining Engineering from the Technical University of Berlin, began his career in the Angolan Oil and Gas industry in 1997, when he joined the Ministry of Geology and Mines of the Republic of Angola as a consultant to the Minister. He was then appointed National Director of International Relations and then Vice-President of the Mining Development Fund. From 1998 to 2017, he taught Mineral Economics for students in the Mining Engineering course, and the evaluation of oil and gas projects for petroleum engineering students, at the Faculty of Engineering of the Agostinho Neto University, in Luanda. He has also been invited to give lectures on economic geology to master's students in geology at the same university.

Tangible results recorded

Under the leadership of H.E. Diamantino Pedro Azevedo, significant progress has been made in the oil and gas sector, namely the restructuring of SONANGOL E.P. in 2018/2020. This reform aimed to redefine the company's orientation for its nuclear activity as a company for the exploration and production of hydrocarbons, refining, marketing and distribution of petroleum

products. This has made this NOC more efficient and cost-effective. Mr. Azevedo also worked on the creation of the National Agency for Oil, Gas and Biofuels (ANPG), in 2019, as a National Concessionaire, with attributions to regulate, supervise and promote the execution of petroleum activities. He also worked on the institutionalization of the Institute for the Regulation of Petroleum Derivatives (IRDP), in 2018, as an organization whose main mission is to regulate the Oil Derivatives Sector.

Reform of the legal framework

Focused on the objective of creating an environment conducive to the return of stability in the sector, the Minister and his team have prepared and submitted for approval several legal instruments. These include DLP No. 86/18 of 2 April on the rules and procedures for tendering for the acquisition of the membership of the national concessionaire and for the award of contracts for goods and services in the oil sector, DLP No. 5/18 of 18 May on the legal regime for additional research activities in the development areas of oil concessions, DLP No. 6/18 of 18 May, which defines the incentives and the procedure for the adequacy of contractual and fiscal conditions in qualified marginal areas,

DLP No. 7/18 of May, on the legal and fiscal regime applicable to prospecting, research, evaluation and development, production and sale of natural gas in Angola and DP No. 91/18 of 10 April on the rules and procedures for the abandonment of wells and the decommissioning of oil and gas installations. Also under his leadership, the Oil Concession Strategy for the period 2019-2025 has been prepared and is being successfully implemented. He has also worked to maximize the recovery of crude oil in producing fields and in development of fields with low attractiveness.

Gas reforms

Here, it is important to highlight the implementation by the Minister of structuring projects for the promotion, development and production of gas, with a particular emphasis on the creation of the New Gas Consortium. Finally, with regard to the challenges of the oil and gas industry, in the face of the Energy Transition embodied by the transition from fossil fuels to renewable energies, MIREMPET has, under its leadership, included in the National Development Plan 2023-2027, some concrete objectives, including those related to the promotion of upstream and downstream energy efficiency with the aim of reducing carbon dioxide and methane emissions, the development of biofuel production, the development of the Gas Master Plan as a strategy for the development of natural gas in Angola with a 30-year vision, focused on the domestic market and exports. He has also worked to encourage the national oil and gas company, Sonangol E.P. and international oil companies operating in Angola to invest in newable and clean energy, to encourage oil companies to also invest in afforestation and reforestation and to implement several carbon offsetting and carbon neutrality projects targeting the carbon credit market.

An exemplary international career

H.E. Diamantino Pedro Azevedo (PhD), has been the Chair of the National Coordination Committee of the Extractive Industries Transparency Initiative (EITI) in Angola, since 2020. In 2022, he chaired the African Petroleum Producers' Organization (APPO), during which period the MoU for the establishment of the Africa Energy Bank was signed in Luanda. In 2021, he was the President of the Organization of the Petroleum Exporting Countries (OPEC). From 2006 to 2017, he was Chairman of the Board of Directors of FERRAN-GOL and Non-Executive Chairman of several mining companies in Angola. During this period, he was involved in different working groups, such as the one set up for the drafting of the new Angolan Mining Code and the National Geological Plan. In 2002, he was appointed Managing Director of the former South and East Africa Mining Centre (SEAMIC), based in Dar Es Salaam, Tanzania, a position he held until 2006.

re-



H.E. Adolphe Moudiki, Administrator Director General (ADG) of SNH, Plenipotentiary of Cameroon to the APPO Ministerial Council and President of APPO

An indelebile stamp on Cameroon's oil and gas sector

Appointed thirty years ago as ADG of the Cameroonian National Oil Company (SNH), H.E. Adolphe Moudiki has had an exceptional career holding various key positions of responsibility, and showing perfect mastery of contemporary African issues, in both technical and administrative fields.



H.E. Adolphe Moudiki was born on 10 December 1938 in Yaoundé. An experienced magistrate, practiced in various iurisdictions across Cameroon, before holding important positions of responsibility in the adminissenior tration and at the head of strategic state companies. He was, among others, the Secretary General of the Prime Minister's Office from 1976 1982, the year in which he assumed the position of Chairman and Chief Executive Officer of the National Railway

Company of Cameroon. In that position, he led the realignment of the Douala-Yaoundé railway, put a fast passenger train into circulation and built a modern central station in Douala. H.E. Moudiki subsequently held two ministerial portfolios. He was Minister of Labour and Social Security (1987-1988) and Minister of Justice, Keeper of the Seals (1989-1991).

Undeniable evidence in the industry

H.E. Adolphe Moudiki was appointed Director and Chief Executive Officer of SNH on 6 February 1993. He then embarked on negotiations on the construction of a pipeline for the transit through Cameroonian territory of crude oil produced in Chad. Construction work on the structure, launched on 20 September 2000 in Kribi, was completed in March 2003. The inauguration took place on 12 June 2004, in the presence of Presidents Paul Biya of Cameroon, the late Idriss Déby of Chad, Theodoro Obiang Nguema Mbasogo of Equatorial Guinea, François Bozizé of the Central African Republic and Blaise Compaoré of Burkina Faso. H.E. Moudiki has also modernized the legal and regulatory framework governing hydrocarbon exploration/production activities, through the implementation of the Oil and Gas Codes, their implementing texts and a standard oil contract.

Eloquent results

As the head of the SNH, H.E. Moudiki has received glowing tributes. Under his leadership, SNH became the company with the highest turnover on the national and sub-regional scene. In 2008, the company won the trophy for the best national oil company in Africa. Today a solid and viable group, a real locomotive of the national economy, SNH currently has 13 companies in its portfolio. H.E. Moudiki is Chairman of the Board of Directors of some of them. Plenipotentiary of Cameroon to the Council of Ministers of the APPO, he was its president from 2007 to 2008. In that capacity, he has led several reforms, including the development of a manual of procedures aimed at improving the administrative, financial and accounting management of the Secretariat and the establishment of the organization's database. In 2018, still in his logic of advancing the oil and gas industry in Cameroon, H.E. Moudiki brought Cameroon into the restricted circle of natural gas producing countries in 2018, making the country the 20th largest exporter in the world and the first in Central Africa. This was made possible thanks to the implementation of the Floating Liquefied Natural Gas (FLNG) project, which resulted in the commissioning of the world's first floating plant resulting from the conversion of an LNG carrier. H.E. Moudiki has received, throughout his exemplary career, several honorary distinctions. In Cameroon, he is Commander and Grand Officer of the Order of Valour and Medal of Valour for the Armed Forces. He is also an Officer of Merit in France and a Commander of Merit in Spain.

Brief on the Petrochemical Industry in Africa

This series examines the African petrochemical landscape, new projects, strengths and weaknesses and recommendations for the development of the African petrochemical industry.

espite the close links it has with the oil refining industry, to which it shares many similarities, the petrochemical industry is very often unknown to the public. In Africa, due to the relatively small number of petrochemical complexes, facilities and, more generally, infrastructure, this lack of knowledge and understanding is accentuated, even though the use of petrochemicals is constantly increasing. In the years to come, the petrochemical industry could provide an outlet for African hydrocarbons, unlike fuels, where growth in demand is slowing. The petrochemical industry is a crucial sector of the chemical industry that focuses on the production of a wide range of chemicals and materials that we rely on every day, inclu-

ding fertilizers used in agriculture in Africa. In General, natural gas, crude oil and to a lesser extent coal are the basic primary raw materials for the manufacture of petrochemicals. According to IEA, in 2017, around 14%, equivalent to 13 million b/d of the world's oil, and approximately 8%, or 300 bcm, of gas, are consumed to produce petrochemicals, about half of which served as feedstock. Looking ahead, of the anticipated nearly 10 million b/d increase in global oil demand by 2030, the chemical industry is poised to contribute over 30%. Primary petrochemicals, key building blocks on which the bulk of the chemical industry is based, account for approximately two-thirds of the sector's total consumption of final energy products.



View of a petrochimical industry

These primary chemicals are divided into three groups depending on their chemical structure:

- Olefins: olefins include Ethylene, propylene, butenes and butadiene.
- Aromatics: aromatics include benzene C6H6, toluene C7H8 and mixed xylenes C8H10.
- Synthesis gas: synthesis gas is a mixture of carbon monoxide and hydrogen used to make ammonia and methanol. Natural gas steam reforming plants are used to produce synthesis gas which is them converted to methanol and ammonia/urea.

The petrochemical industrial landscape in Africa

The African continent possesses a growing petrochemical industry, with existing plants and promising potential for further development. A breakdown of the landscape shows that for the current situation, over fifteen (15) active petrochemical complexes spread across various countries, with significant concentrations in Egypt and Algeria. A wide range of products is produced, including plastics (polyethylene, polypropylene, PVC, etc.), fertilizers (urea, ammonia, etc.) and detergents and other chemicals: methanol, butadiene, etc. North Africa have built a dynamic and diverse petrochemical landscape with a significant impact on the region's economy and development. The region is also a hub of petrochemical activity in Africa. For his part, West Africa hosts a burgeoning petrochemical industry, with significant potential for growth driven by increasing domestic demand, abundant natural resources in some countries, and export opportunities. Basic petrochemical plants have only been identified in Nigeria. As for the Central African region, the petrochemical landscape is currently very limited. The petrochemical plant in Chad has been identified as the unique facility able to produce basic petrochemicals. Furthermore, with two major petrochemical plants, South Africa's petrochemical industry stands out as the most established and developed in Southern Africa, boasting a rich history and significant contributions to the national economy.

Petrochemical projects in Africa

There are several petrochemical plant development projects in Africa aimed at expanding the continent's petrochemical industry. These projects are intended to leverage Africa's natural resources and meet the growing demand for petrochemical products. Here's

a glimpse into some key projects.

Tahrir Petrochemicals Company Ain Sokhna Complex

The Tahrir Petrochemicals Complex will be built on the northern outskirts of Ain Sokhna in Suez Governorate, in Egypt. The complex is a project spanning a 3.56 million square meters. The Tahrir Petrochemicals Complex is a 4,000,000 metric tonnes per annum naphtha cracker plant. This facility will be complemented by downstream units capable of producing propylene, polyethylene and butadiene

The Egyptian Petrochemicals Holding Company El-Alamein Complex

The Egyptian Petrochemicals El-Alamein Complex will be constructed on 6.72 square kilometer in New Alamein City, located in Matrouh Governorate, Egypt. The complex is expected to produce styrene, propylene, acetic acid and other products. The project is currently in the announced stage and is expected to start commercial operations in 2028

Brass Fertilizer & Petrochemical Company Brass Complex

The methanol and ammonia production complex would be situated in Odioma, Brass Island in Bayelsa state and operated by Brass Fertilizer & Petrochemical Co (BFPCL).

The plant is expected to produce 770,000 metric tonnes per annum of ammonia, 1.3 million metric tonnes per annum of urea, and 1.75 million metric tonnes per annum of methanol.

OCP Group & Nigeria Sovereign Investment Authority

In May 2022, Nigeria Sovereign Investment Authority (NSIA) and OCP group, a Moroccan Company, agreed on a joint venture to build a fertiliser plant. The project will be sited in Akwa Ibom State. The plant is expected to utilize Nigerian natural gas to produce 750,000 metric tonnes of ammonia and will be inaugurated in 2025.

Finally, *Tanzania Mbolea and Petrochemicals Company Kilwa Complex* is an upcoming petrochemical complex located in Lindi, Tanzania. The Kilwa Complex will use natural gas as its key feedstock. It will produce a variety of petrochemical products, including urea and ammonia. The complex is expected to commence commercial operations in 2028.

Optimizing upstream partnership agreements

The objective of this analysis is to highlight critical areas in the negotiation of upstream agreements with a view to avoiding loopholes that could be costly for producing countries. Eleven areas are examined, namely, Environment, Technology transfer, Local Content, Fiscal regime, Taxation, Natural gas management, Qualifications, Projects development timing, ESG (Environmental, Social and Governance), Maintaining Standards, and Governance (transparency and institutions).

ew license rounds are in preparation in oil and gas producing countries that want to take advantage of a global high energy price environment in a fragmented geopolitics world characterized with price volatility and demand outlook uncertainty. Our recommendations aim to preserve the bargaining power of the Member Countries during the negotiations.

The recommendations build upon three main inputs, the Comparative Study of the Legal and Contractual Hydrocarbon Regimes in the APPA Member Countries issued on 31st July 2012, highlights from the 2019 petroleum laws revisions in Algeria, Benin, Cameroon, Gabon, Senegal, Somalia, and South Africa, and the currently observed trends in the industry main stakeholders of Public (Government), Private (Companies) and the Civil society.

The evolution of petroleum contracts is historically the manifestation of political, economic, environmental, and social developments. Cost, risk sharing, and national control have been forming the basis of that evolution.

In a nutshell, petroleum jurisdiction's fiscal regimes consist of royalties, taxes and other mechanisms developed by the State to claim a share of the economic value generated by upstream activities. Ideally, States adopt long-term fiscal regimes that are simple, predictable, stable, and transparent, striking



The State's key considerations when designing a fiscal regime for the petroleum sector at a minimum address the following subjects:

1. The goal of the fiscal regime

- Incentivize investment.
- Maximize government take.
- Increase employment, infrastructure development, economic diversification, and environment preservation.
- Balance the State received benefits of royalties and taxes against the burdens across various fields and petroleum regions.



2. The fiscal regime is tailored to different petroleum types.

- Petroleum resource types to be developed and the fiscal regimes that are best aligned to the petroleum profiles i.e., a one-size-fits-all approach vs petroleum types.
- State fiscal regimes design that incorporates a defined reasonable Return on Investment (ROI) for the investor.

3. The fiscal framework system promotes longer-term goals and is supportive of the construction of enabling infrastructures.

- The impact of today's fiscal regime on the level of future upstream petroleum activities.
- Sustainability of higher taxes/royalties on a smaller number of petroleum fields vs lower taxes/royalties across a larger base.
- Fiscal policies impact local economic value from the petroleum sector.

4. The choice of the fiscal regime and the impact on profitability and commodity prices.

- Neutral the State receives the same share of profits regardless of profitability profile.
- Progressive the State receives a larger share of the profit when profits increase.
 - Regressive the State receives a lesser share of the profit when profits increase.
 - A smart combination of the three modes.

5. Transparency and legal clarity of the fiscal regime.

- Simple to administer and comprehend.
- Policy changes are flagged well in advance of legal adoption. Stakeholders and investors are informed and consulted.
- Fair and equitable dispute resolution processes.

6. The fiscal regime fully embeds stakeholders' considerations.

- Societal constraints such as local communities' consultations, environmental and social governance (ESG), corporate social responsibility (CSR), infrastructure, public housing, and other non-monetary forms of benefits.
- Geopolitics such as the energy transition, cybersecurity, and countries' competition.

Mr. Mohamed Souidi is the first Executive Secretary of APPA

stablished on January 27, 1987 in Lagos, Nigeria, the African Petroleum Producers' Organization (APPO), formerly known as the African Petroleum Producers Association (APPA) was created to serve as a platform for cooperation and harmonization of efforts, collaboration, sharing of knowledge and exper-

tise among African oil-producing countries. Its very first Executive Secretary is Mr. Mohamed Souidi from Member Country Algeria. Mr. Souidi holds a master degree in state engineering in Refining, Petrochemicals and Technical-Economics and has good command of Arabic, French and English. He began his career at the Algerian Petroleum Institute (IAP) where he worked for eleven years in research and development activities and engineering training. He then joined the Ministry of Energy

where he held senior state positions for a dozen years as Director of Oil and Gas Activities.

A pioneer

Appointed as the first Executive Secretary of the African Petroleum Producing Association (APPA) in 1989, Mr. Souidi had the delicate task of laying the foundations of the young Association. Drawing on his rich experience at both the IAP and the Ministry of Energy, Mr. Souidi held this position for six years. Several achievements are to his credit. These include, inter alia, the establishment, launch and management of the Secretariat, the conduct of the

study for the establishment of the APPA Data Bank, the creation of the APPA Fund of Technical Cooperation and the launching and directing of the publication of the APPA Bulletin from 1991 to 1995. Mr. Souidi also organized and actively participated in the official meetings of the APPA, whether they were the Councils

of Experts, and he proceeded to the implementation of the Action Programs from 1989 to 1995. After the end of his second term as Executive Secretary, he was designated in 1995 in Luanda by the Council of Ministers as permanent consultant to APPA. In 2006, Mr. Souidi was appointed as the first Executive Director of the APPA Fund for Technical Cooperation, headquartered in Cotonou, Benin. In this capacity, he was responsible for the establish-

of Ministers or the Committees

ment, launch and management of this Fund. Mr. Souidi has a good knowledge of the Algerian, African and international industrial and oil environment.

Proven industry expertise

After his term as Executive Director of APPA Fund, his expertise was required, for the elaboration of the APPA'S program of actions and as consultant with the participation of experts from Côte d'Ivoire for, the audit of the economics of the refinery of N'djamena in Chad, particularly that of the price of petroleum products at the refinery outlet. He has conducted or taken part in several works and studies,

including a feasibility study of industrial units and structures to produce goods and services, the elaboration of a model of crude oil relative values at the London Queen Mary College on behalf of OPEC, a study of a global energy model designed by the University of Southern California on behalf of OPEC, as well as a study on the adequacy of supply and demand for petroleum products in Algeria with the development of a mathematical refining model. He has led revamping projects for the Nouadhibou Refinery and the construction of the Nouakchott

LPG plant and participated in the Think Tank on the development of a national energy policy and the design of an energy consumption model. In addition to his studies and work, he is skilled at creating and facilitating training programs, developing energy models, analyzing techno-economic studies, organizing international seminars, participating in conferences, and producing exhibitions. During his career, he has developed and consolidated very strong relationships with African and foreign companies.

Mohamed SOUIDI: « I remain attached to the activities of APPO as well as those of the Fund, which I consider to be my babies ».

In 1989, I applied for a position in the OPEC Secretariat. The Minister of Energy at that time, His Excellency Sadek Boussena, had invited me to his office to declare that he did not see in me a candidacy other than that of Secretary General of the Organization. However, the position was not vacant and it would have been necessary to wait several more years for the end of the mandate of the current occupier. It was then that the Minister proposed that I apply as the first Executive Secretary of the African Petroleum Producers Association (APPA), whose activities had just been decided by the Council of Ministers. Two candidates were in the running, after deliberation by the Council of Ministers, I was appointed.

My duties began in 1989 with a secretary and a driver provided by the host country at my side. My activities consisted of setting up the various Statutes as well as the Headquarters Agreement with the contribution of the Member Countries. The accomplishments made during the two terms of my term are well described in the Magazine article. It was only one year later that the Secretariat was strengthened with the appointment of the Administrative and Financial Assistant from Cameroon and two years later by the appointment of the Technical Assistant from Nigeria.

My vision and objective was that the missions assigned to the Association as described in the agreement establishing the APPA would be implemented quickly and effectively. This was achieved through the preparation and implementation of action programmes and the voluntary assumption of responsibility for actions by the member countries, which were submitted for approval at the sessions of the Council of Ministers. I would have liked to have seen the effective development of exchanges of experience and cooperation, in particular the exchange of expertise available in Member Countries, as well as the implementation of studies and projects in partnership.

At the end of my two terms (which was the maximum), my designated successor at the head of the Secretariat was Mr. Maxime Obiang, a native of Gabon. I have taken away from my mandate an exhilarating and very enriching international experience and I thank the Member States for the trust placed in me.

Eleven years later in 2006, when the APPA Council of Ministers decided to start the activities of the APPA Fund for Technical Cooperation in Cotonou, Benin, I was selected and elected for the position of Executive Director of the Fund thanks in particular to the international experience acquired during my time at the head of the Executive Secretariat of the Association. Here too, I have had the same journey as the one I experienced during my two terms as Executive Secretary of the Association. Thanks to the contribution of the host country, as soon as I took office, a driver and a year later, a secretary, were made available to the Fund's management. It was only during the last year of my mandate, in 2009, that the Fund's management was strengthened, again thanks to the support of the host country, by the provision of an Administrative and Finance Assistant from Benin.

I started by setting up the institutional framework of the Fund and, since the Fund's operating budget was financed exclusively by the interest generated, I had to make the investments of the Fund's Share Capital with great care, which at the time amounted to five million US dollars. During the same year and on the recommendation of the Council of Ministers, a preliminary draft on the development of the eligibility criteria as well as the conditions of financing by the APPA Fund and repayment by the borrower, was prepared by the Fund's Management and transmitted to the Executive Secretariat of the APPA associated with this mission, with a view to its examination by the Committee of Experts before submission to the Council of Ministers.

During the short period at the head of the Fund's Directorate, I regret not having been able to attend the concrete implementation of funding for studies and individual or collective projects with a view to developing Technical Cooperation, which is the Fund's main vocation.

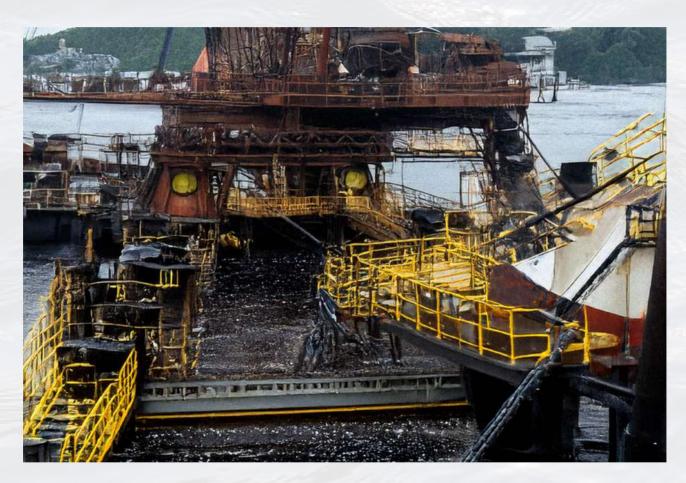
Despite the requests of several Member Countries, I did not want to apply for a 2nd term for family and personal reasons. My successor, Mr. Babafemi O. OYEWOLE from Nigeria, has been appointed as the head of the Fund's Executive Directorate

Nevertheless, my time at the Fonds has allowed me to enrich my experience in the financial field.

I have excellent memories and remain close to the activities of the APPO as well as that of the Fund, which I consider to be my babies.

1973: The first oil crisis

An oil shock is a global oil price crisis. It is characterized by a sharp rise in the price of oil, which has a negative impact on global economic growth. In the opinion of economists, two oil shocks marked the history of the twentieth century. The first happened in 1973.

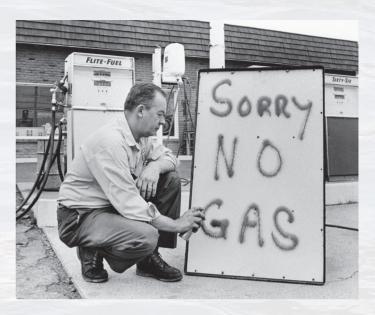


he occurrence of the first world oil crisis in 1973 can be explained by several factors, particularly the international context marked by the Yom Kippur War. Indeed, in 1973, the conflict was raging between Israel and its Arab neighbors. The United States and some European countries offered military and other support to Israel in the war against the Arabs. In return, Arab Oil Exporting Countries decided to embargo oil sales to the US and the European states. That decision was unprecedented in the history of the global energy market where the US and Europe had for decades become comfor-

table relying on foreign energy to drive their economies and to live comfortable lives. It is important to note that during the decade of the 1960s, oil demand grew by more than 7% per year. As early as 1972, the United States reached its «peak oil», i.e. the point of maximum production. To compensate for this shortage, the United States imports an ever-increasing quantity of oil, particularly extracted in the Middle East. The embargo resulted in a spiral rise in global oil prices, financially empowering the oil producers and also making them have a big say in the determination of the oil market.

The effects of an economic crisis

The shock has had a significant impact on the economies of all oil-consuming countries. The result is a period of stagflation, combining weak growth with a sharp rise in prices. More generally, the first oil crisis marked the end of the period of accelerated growth experienced by Western countries, due to the availability of cheap oil. As the overall production in these countries is disrupted by the increase in the price of oil, companies are partially passing on the increase in their production costs to their customers. This results of these developments are that the political leadership of the United States and the countries of Europe resolved to wean themselves away from dependence on foreign oil. And so, from the 1970s they have focused on developing strategies to be independent of forei



A station in Pennsylvania in 1973



A double line cars in a gas station in New-York city in december 1973

gn energy. After many failed attempts, they succeeded in imposing a new paradigm shift on energy sourcing, euphemistically the Energy Transition. Since the Paris Climate Agreement of 2015, these countries have herded the rest of the world to abandon fossil fuels for re

newable energies. Not many people truly understand that the quest for Global Energy Transition being championed by the developed countries of Europe and America who were also victims of oil embargo in 1973, is driven more by the quest for energy security than climate concerns.

Limiting fuel waste

Fuel, especially petrol and diesel, are commodities that have become almost essential in modern life. They are used for our daily activities (trips, electricity generation, Small, Scale and large industries, ...). With simple measures, it is possible to reduce fuel consumption to save money, and even better, to preserve the planet.

ips for reducing your own fuel consumption can be put into practice, before you hit the road and while driving. They also concern decision-making regarding one's travel. Before you even hit the road, it's important to keep your vehicle in good shape. Indeed, a faulty engine can lead to high fuel consumption. It is therefore important to carry out a car service at the indicated time, to change the oil and to check the oil level before hitting the road. Apart from the engine, the tires should be checked for optimal gauge. The lack of air in the tires, the poor alignment of the wheels and their wear and tear are factors that contribute to increased fuel consumption. It is also advisable to lighten the car by unloading it of all unneces-

Adopt eco-driving

sary objects, trunks and roof racks that are not useful to you.

Finally, don't always fill up because fuel also weighs down your car.

Eco-driving is a fuel-saving, ecological and economical driving technique adapted to current engines. This driving mode recommends several measures to avoid wasting fuel. The first step is to slow down. It is important to know that your consumption increases with the speed at which you drive. You also must anticipate braking, and above all, drive at a constant speed. This involves braking gently and shifting up gears as soon as possible. You must remember to leave enough safety distance between you and the vehicle in front

of you so that you can then accelerate gradually without filling the gap between it and you. Therefore, it is advisable to turn on the air conditioning only when driving at medium speed, and not when driving at low speed. And of course, you must remember to turn off the engine when you are at a prolonged standstill, including in traffic jams.

Don't leave

Another way to save fuel is not to leave at all, in other words, to limit unnecessary car trips. You can also, when possible, choose the times of your trips wisely by avoiding rush hour, since the consumption of a car stuck in traffic

can almost double. Also, even when stationary, your machine can make you consume fuel. Indeed, if you park it in direct sunlight, it will take longer to cool down and some of the fuel can evaporate under the effect of heat. Also, if you are in the city, take public or common transportation, organize carpooling with your loved ones. Together with your work colleagues who live near you, you can organize a schedule for joint trips, which will reduce fuel expenses. You can also limit small trips, which are the most expensive. For short trips, take the bike or go by foot, and your cardiovascular system will thank you.

CULTURAL PIPELINE



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APPO MAGAZINE SUPPLEMENT - CO-PRODUCED WITH VENEZUELA

Editors: Carmen Fifamè Toudonou / Aníbal Márquez Muñoz

EDITORIAL

Cultural Pipeline is a concept inscribed in the humanist vision of the people of Venezuela about the rational use of oil resources. Its genesis dates back to 2009 and stems from the widespread presence of oil in the Venezuelan subsoil, its intensive exploitation and the centuries-old struggles for equity in the social enjoyment of such a precious non-renewable oil.

Cultural Pipeline revives a new oil culture whose essence advocates that, in the pipelines used for the transport of conventional oil – together with the fossil product itself – an intangible and fundamental component is also transported. Its formula: Oil + Culture.

Otherwise, oil would be transported for dispossession, environmental withering, etc., and not for what it should be: Oil for peace, economic progress, collective well-being, fraternity, union and energy sovereignty of the peoples of the Global South.

Since these aims are the Vision and Objectives of the African Petroleum Producers' Organization (APPO), we join its editorial thrust by inserting in its emblematic Institutional Journal the "Oleoducto Cultural Magazine", whose joint conception and dissemination reaches -in good time- loving connotation and bicontinental dimension. Africa and Venezuela, a single flag.

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Wangari Maathai: Life and works of a committed activist for the planet

Carmen Fifamè Toudonou

Wangari Muta Maathai (1940-2011) was a Kenyan activist who left her mark on her time with her commitment to the cause of the planet. We offer you a look back at the inspiring journey of the first African woman to be awarded the Nobel Peace Prize.

Forn on April 1, 1940 in Ihithie, Kenya, Wangari Muta Maathai went to study in the United States and Germany, after obtaining her baccalaureate in 1959. After achieving several degrees, she returned to



her country where, in 1971, she was the first woman to obtain her doctorate in veterinary medicine in East Africa. Appointed as a university teacher, she fought against discrimination between men and women, and thus obtained equal pay. The year 1971 saw the creation of the Green Belt Movement whose objective was to plant trees to fight poverty.

Indeed, during her years of field research, the young woman established the link between deforestation, soil erosion and threats to the health of herds, agriculture, and consequently, the health of populations. Also, she shows that in rural areas, women lack wood, water and food resources. Thus, for her, environmental issues, poverty problems and conflicts are linked causes. Mobilizing Kenyans and especially Kenyan women within her Movement, she managed to plant more than 30 million trees with them, also pushing the UN to implement a strategy that has made it possible to plant more than 11 billion trees around the world.

Political Engagement and Legacy

From the 1980s, Wangari Maathai became involved in the fight against the abuses of political power. Mobilized with the citizens of Nairobi, it managed to prevent the removal of Uhuru Park, the green lung of the capital, by the authorities who wanted to build a tower there. In 2002, she was elected as a member of parliament, and the following year she created the Mazingira Green Party. She was also appointed Minister Delegate for the Environment in 2003 for two years. She was awarded the Nobel Peace Prize in 2004: she was the first African woman and the first ecologist to receive this prize. For her, this prize rewards Africa and particularly African women. Afterwards, she traveled the world for environmental conferences. She was appointed as the first Chairperson of the Economic and Social Council of the African Union. A tireless human rights and environmental activist, Wangari Maathai passed away on 25 September 2011 at the age of 71. She had three children. The world remembers her as "the woman who planted trees". As for the Green Belt Movement, it has become international, always faithful to Dr. Maathai's formula: "When we plant trees, we plant the seeds of peace and hope."

Natural resources, Carbon Sinks and National Parks

National Climate Crisis Observatory

landmark environmental day set an important tone in the history of contemporary relations between Africa and the emblematic continents of our planet. We are referring to the «2nd Summit of the Three Tropical Forest Basins: Amazonia, Congo and Borneo-Mekong Southeast Asia» which had as its main promoter - in October 2023 - the environmental authorities of the Republic of Congo. The historic meeting led by our Global South raised - among other determinants objectives - the conservation of the aforementioned ecosystems and lungs of the planet, as well as the importance of international collaboration in the preservation of the environment and biodiversity. At the invitation of the above-mentioned host African Republic - a country that is also the permanent headquarters of the Strategic African Petroleum Producers Organization (APPO), of which Venezuela is the only non-African Member Country - the leaders and government authorities of Africa and Latin America and Southeast Asia, together with representatives of the private sector and social organizations, to strengthen the alliance for the defense of the ecosystems of the Amazon, Congo and Asia.

A high-level delegation led by the Minister of Foreign Affairs and the Head of the Ministry of Ecosocialism was present and had a notable participation in Venezuela. The South American country reaffirmed its



position to build an economic model capable of protecting the environment, in harmony with the new multipolar world order being built.

Contemporary climate distor-

tions constitute a multifactorial face of the attacks on our planet, which is why our human race, as the cause of them, due to outdated organizational and economic patterns, has dedicated itself to efforts to combat them.

One of the most effective strategies to achieve this is to delineate specific areas, with environmental characteristics capable of providing ecosystem services that help mitigate the processes inherent in climate crises. These delineated areas are national parks, a figure that has gained relevance and applicability around the world, given its viability.

Venezuela, given its status as an oil-producing country and the main country with oil reserves on planet Earth, assumes the task of promoting the conservation of natural systems in synergy with the unavoidable common objective of contributing to saving the human species and protecting the planet.

In Venezuela, there are 44 national parks, protected by the figure of the State as «Zone under Special Administration Regime» and managed by the Institute of National Parks. The immense vegetation covers that are part of the Venezuelan Amazon - particularly in the south of the Orinoco basin - represent natural reservoirs of biodiversity. Thus, national parks such as Canaima, Parima-Tapirapecó or Caura play a fundamental role in the national and international narrative that promotes the protection of these spaces in their role as authentic carbon sinks and reservoirs of one of the greatest natural riches in the world as we know it.

DJEMBE: Ancestral Heartbeat of Africa

Babacar Dieng

ne Djembe, one of the most representative drums in West Africa, is not just a musical instrument. Its history is steeped in a rich cultural tradition that connects with the soul of the



continent, the majestic trees and the ancestral voices that resonate through the centuries.

This drum has its roots in the Mali Empire, a vast kingdom that dominated West Africa between the thirteenth and sixteenth centuries. The Djembe was a centerpiece in the social and spiritual rituals of the Mandinga tribes, originating in present-day Mali and Guinea. Forged from the lenke or mahogany trees, the Djembe symbolizes the connection between African nature and its inhabitants. These ancient trees provide the mate-

rial that gives life to the drums, while the animal skins stretched over the mouth of the drum emulate the vital breath of African fauna. By striking the Djembe, the musicians invoke the spirits of nature, paying homage to the ancestors and seeking guidance from their wise voices. The Djembe had an essential communicative function: depending on the rhythm and touches, key information could be transmitted to the community, the arrival of a king, the birth of a child, a woman giving birth, or urgent warnings, such as a snake bite. Each sound carried a clear message, making Djembe a vital tool in everyday life between villages.

The Djembe arrives in Senegal as part of the cultural expansion and migration of the traditions of the Mandinga people throughout West Africa. During the splendor of the kingdom of Mali, music and Djembe spread to other communities. As the empire declined, the Djembe maintained its cultural relevance in other Senegalese ethnic groups such as the Wolof, Serer and Toucouleur.

One of the ways in which Djembe was consolidated in Senegal was through griots: traditional storytellers and musicians guardians of the oral history of their communities, preserving the genealogies and feats of their peoples through music and words.

In addition, the trans-Saharan trade that connected various parts of Africa facilitated the arrival of the djembe, as merchants and travelers brought with them cultural elements such as drums.

Gorée Island, known for being a key point in the transatlantic slave trade, adds a poignant dimension to this story. From its shores, countless Africans were torn from their land to be taken to different regions of the world as enslaved. In this context, drums such as the djembe became symbols of resistance and cultural preservation. Through the drum, the enslaved and their descendants kept alive their connection to Africa, its history, its gods, even in the darkest of times. In Gorée, the vibrations of the djembe resonate like echoes of freedom, remembering those who were taken away, but never forgot their home. The djembe remains a powerful symbol of cultural unity and resistance, both in Africa and in the diaspora. The history of this drum is the history of Africa itself, deep as that of the trees that feed it and continue to transmit their stories through the generations.

Discovering the Petro Tambour

Fundación Grupo Madera // Noel Márquez

he Constitution of the Bolivarian Republic of Venezuela establishes that we are a multiethnic and multicultural nation. This vision recognizes the cultural contribution of "Mama Africa" to the shaping of our idiosyncrasy derived from the enslavement of millions of people snatched from the African continent and who, today, are part of our free and sovereign homeland.

The Drum is one of the traces of African spirituality in the shaping of our national identity. The drums with which we perform rhythms, songs and dances, evidence the ancestral presence of our cultural resistance.

The Petrotambor's Project developed by the Madera's Group Foundation is a contribution to the expression of our African heritage. It is inserted in the notion of «Cultural Economy» and consists of the manufacture of percussion musical instruments using raw material from our oil and petrochemical industry, to massify the use of drums in various social, educational and cultural programs through the study and execution of the diversity of rhythms, songs and dances of African origin and roots.

The PETROTAMBOR is a profoundly ecological product since, in its construction, no trees are cut down, protecting nature from desertification and global warming. Due to its design and constructive form, it has extraordinary sound quality and allows the various rhythms of music and culture of African origin to be faithfully executed. It is the only existing system in the country that allows the production of percussion musical instruments on a large scale and quickly.

With our PETROTAMBORs we designed a proposal aimed at structuring a Cultural Partner Activation Network aimed at children, young people, adolescents and adults as an alternative for community organization through the performance of Afro-Venezuelan popular music. In this way, we enable the creative use of the participants' free time to develop edifying activities – for themselves and for the community – becoming participatory and protagonist agents of social prevention and cultural dissemination, as well as front-line actors in the defense of National Identity.

In short, our South is to satisfy the need of popular communities to have quality and low-cost musical instruments that allow them to structure and organize sustainable cultural partner projects, strengthening the values of

