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July 2024 MAGAZINE

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Africa Energy Bank

A dream come true!

EDITORIAL

At last, Africa can boast of a financial institution that is truly conceived and birthed by Africa and for Africa. For decades the African oil and gas industry has been heavily dependent on foreign financing for funding, producing, processing and marketing its oil and gas.

The advent of the global paradigm shift away from fossil fuels to renewable energies and the decision of those on whom African oil and gas producers have depended on for project financing to end fossil fuel funding in Africa has thrown up a new challenge to the continent's oil and gas industry. For many oil and gas producing African countries, oil and gas remain the life of the economy. Governments rely heavily on oil and gas revenue to meet the basics of governance. So an alternative source of funding must be found.

It was this imperative, together with the recognition that nearly a billion of Africa's 1.48 billion people do not have access to modern energy while the continent is sitting on over 125 billion barrels of proven crude oil reserves and over 600 trillion cubic feet of gas that informed the idea of creating the Africa Energy Bank .

This feat is due to the combined action of the eighteen Member Countries of APPO, the direction of the Ministerial Council and the Executive Board and also our partner, Afreximbank, particularly the visionary leadership of Professor Benedict Oramah, President and Chairman of the Board of Afreximbank.

The idea was there, broadly understood with the prevailing disenchantment against hydrocarbons, which leads to a growing lack of interest in financing the sector, Africa will only



*Dr Omar Farouk Ibrahim
SG of APPO*

owe its salvation to independence for the financing of oil and gas-related activities on its territory. Clearly, African countries cannot do without the real opportunities for development offered by the exploitation of the energy wealth of their subsoil, in their policy of creating better living conditions for their populations. This was the observation, but it was necessary to find a way to achieve what is no longer an option, but a necessity for the continent: to free itself financially from dependence on the outside world for the development of its oil and gas reserves. This is where the idea for the creation of the Africa Energy Bank was born.

The 42nd Session of the APPO Ministerial Council, held in Luanda, Angola passed a Resolution directing the Secretary General of APPO and Managing Director of Africa Energy Investment Corporation (AEI-Corp) to negotiate with Afreximbank the modalities for the establishment of the Africa Energy Bank. And for 2 years, several negotiation meetings were held by a working group, culminating in the production of an Establishment Agreement and a Charter for the Bank as well as a Draft Host Country Agreement. The first two documents were signed by the heads of the two founding institutions, namely HE Professor Benedict Okey Oramah for Afreximbank and Dr. Omar Farouk Ibrahim for APPO, on Monday 3rd June 2024 in the Office of the Minister of Petroleum and Mineral Resources of the Arab Republic of Egypt, HE Engr. Tarek El Molla. Having signed off on the establishment documents of the Bank, the next stage is the ratification by Member Countries and the selection of the Headquarters of the Bank. Six Member Countries have expressed interest in hosting the Bank and four have invited the inspection team to visit what they are providing as Headquarters building for the Bank. The team completed its assignment on 31st May 2024 and submitted its report to the AEB Headquarters Ministerial Selection Committee. In the meantime, interest in the project has been growing in many Member Countries evidenced in the torrent of commitment for subscriptions to the share capital of the Bank and payments made even before the Bank has taken off.

APPO is rightly congratulating itself on how far we've come. But it is not lost on us that much remains to be done. Efforts will therefore be continued to consolidate the Bank so that it can conquer and occupy a prominent place in the concert of the

most credible international financial institutions. With an initial authorized capital of \$5 billion, the Bank is expected to significantly reduce African countries' dependence on Western sources of financing for their oil and gas projects, which are now less accessible due to the Energy Transition. The purpose of this financial institution is to provide a long-term financing mechanism for the development of the oil and gas industry in Africa. We have no doubt that its creation will breathe a new life into the industry, as it will provide the right financial resources for the development of innovative programs and projects in the oil and gas sectors on the African continent.

There is clearly a need to strike the right balance between the imperatives of climate change mitigation and the need to avoid social upheaval that could result from difficult economic and financial conditions in Africa. By making this choice, Africa is deciding, not to go as a propitiatory victim to the altar of the energy transition, but to take its destiny into its own hands, prioritizing the destiny of the nearly one billion or so Africans who have no access to any form of modern energy. And to put it bluntly, solving the problem of energy financing in Africa, far from being a game, remains a matter of life and death. In Africa, industrialization is our top priority, and this cannot be a reality in a context of quick abandonment of hydrocarbons. APPO Member Countries understand this. They understand that the time for action has finally come. The creation of the Bank will open a new page in the annals of Africa's energy adventure. May this page be strewn with success, for the happiness of the African peoples who only want to be counted in the great march of peoples towards a better life. It is, no more and no less, a question of human dignity.





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African Petroleum Producers’ Organization, APPO
 Address: City Centre 76, Av. Amilcar Cabral, Brazzaville,
 Congo-Brazzaville
 Phone: +242 06 563 5927
 Email : info@apposecretariat.org

Website : www.apposecretariat.org

Visit the APPO website for the latest news and information about the Organization.
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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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Office of the Secretary General

Secretary General : Dr. Omar Farouk Ibrahim
Head of the Office : Mr. Bakary Traoré
Legal Counsel : Mr. Bakamba Loguelko
Editor : Mrs Carmen Fifamè Toudonou

Research Division

Director : Dr. Taher M. O. Najah
Head of the Energy Studies Unit: Mrs Temilola George
Head of the Technical Cooperation Unit: Mr. Tchananti Sahgui Tiatti

Division, Support Services

Director : Mrs Philomena A. Ikoko
Head of the Administration, IT and Organization Resources Unit : Mrs Chimdimma Okpara

Contributors to this issue:

Mrs Zerfa Belkassem
Mr. Jean Michel Akossi
Mr. Boubacar Amadou
Mrs Kounouga-Lemba Bénédicte La reine
Mr. Viven Walter Kessi
Mr. Djegolbe Kode
Mr. David Raymond Edet

Cover

The cover of this issue shows the signing ceremony of the Establishment Documents of the Africa Energy Bank on June 3, 2024 in Cairo, Egypt.
(See our Top News from page 30).

Brazzaville Hosts Inaugural Oil and Gas Local Content Roundtable

THE REPUBLIC OF CONGO HOSTED ITS FIRST-EVER ROUNDTABLE ON LOCAL CONTENT IN OIL AND GAS AT THE END OF MARCH. THE APPO SECRETARIAT AND SEVERAL APPO MEMBER COUNTRIES PARTICIPATED IN THE ROUNDTABLE, WHICH LASTED TWO DAYS, 21 TO 22 MARCH 2024.

CONFÉRENCES

The challenges and opportunities of implementing a Local Content Development Programme in the Congolese oil and gas sector were at the heart of discussions at the roundtable held at the Radisson Blu Hotel, in Down Town Brazzaville. Initiated by the Ministry of Hydrocarbons, the Round Table brought together delegations from Algeria, Cameroon, DR Congo, Côte d'Ivoire, Gabon, Ghana, Equatorial Guinea, Nigeria and Senegal. In his opening address at the occasion, His Excellency Mr. Anatole Collinet Makosso, Prime Minister of the Republic of Congo, who represented the President His Excellency Denis Sassou Nguesso, welcomed the initiative of the Ministry of Hydrocarbons in or-

ganizing the roundtable and commended Minister Bruno Jean Richard Itoua for his visionary leadership of the Congolese oil and gas sector. Prime Minister Makosso reviewed the initiatives taken by the government to make the hydrocarbon sector a model for the promotion of local content. These include the ongoing development of a framework law on multi-sectoral Local Content, the establishment of a regulation for the monitoring of legislation among others.

THE CRITICAL IMPORTANCE OF LOCAL CONTENT

In his welcome address, Minister Itoua commended the government and the parliament for their support in the legislation on Local Content, emphasizing that President considers Local Content development in the oil and gas sector as well as other sectors of the economy of critical importance. Minister commended Sarah Rihane Sockath of the Ministry for her exemplary role in organizing the inaugural roundtable. In his goodwill message to the roundtable, APPO Secretary General Dr. Omar Farouk Ibrahim expressed happiness with the large turn out of APPO Member Countries to the roundtable noting that Africa's success lies in cooperation and collaboration among its countries and people. Dr. Farouk emphasized the timeliness of the roundtable, noting that a study conducted by APPO on the future of the oil and gas industry in Africa in the light of the energy transition had identified three imminent challenges, namely funding, technology and human capacity and energy infrastructure and markets. Dr. Farouk posited that by focusing on Local Content development, the technology and human capacity challenge can be addressed. He however added that for research and development and innovation in the oil and gas industry African countries need to collaborate and pool resources to pursue similar goals.



His Excellency Mr. Bruno Jean Richard Itoua, Minister of Hydrocarbons of the Republic of Congo

Dr Farouk challenged industry players to wake up to address the challenges before it is too late for Africa, arguing that the developed countries are determined to end fossil fuel use, not only in their societies but to also force others to end fossil fuel use. He stated that Africa, which has one third of its 1.5 billion population living without access to modern energy cannot afford to abandon fossil fuels in anticipation of renewables whose certainty cannot be guaranteed.

GETTING STARTED WITH INDUSTRY TECHNOLOGY

The real challenge facing the African continent is how to get to grips with technology, in a context where the exploitation of fossil fuels seems to be increasingly neglected by Western investors. «Africa cannot allow more than 120 billion barrels of proven oil reserves and more than 650 trillion scf of natural gas to be wasted, devalued because those on whom we depended for technology to exploit these resources have decided to abandon them. To be able to continue to benefit from these God-given resources, we have no choice but to quickly master the technology of the industry» said the APPO Secretary General. He commended the efforts made in some member countries to put in place legislations to support Local Content development, while noting that the Local Content strategy should also focus on overcoming technological dependence, upstream, in the middle of the chain and downstream. «Africa has what it takes to master the technology of the industry if African countries pool their resources for the common good of all,» he noted.

MAXIMIZING THE PARTICIPATION RATE OF DOMESTIC ACTORS AND COMPANIES IN THE VALUE CHAIN

The roundtable touched on many issues including the issues of access to finance as well as the lack of a framework for sharing experiences among APPO Member Countries on the implementation of Local Content. Numerous sessions, introduced by specialists, and bringing together international and national experts, provided an opportunity to discuss these themes. Mr. Tchananti Sahgui Tiatti, Head of the Capacity Building and Technical Cooperation Unit at the APPO Secretariat who moderated the first panel which focused on the issue of Local Content policies and strategies of the oil and gas

sector in African countries, called for greater cooperation and collaboration amongst industry players across the continent, and proposed student and staff exchange programs. The representatives of Algeria, Côte d'Ivoire, Gabon, Nigeria and Senegal each presented the process and lessons learned from the implementation of their Local Content Development Policy and Programme in their respective countries. The subsequent panels were devoted to the legal and regulatory framework, the participation of national and private companies, the specific case of the downstream subsector, as well as feedback on the implementation of Local Content in oil companies in Congo.

PUTTING EVEN MORE EFFORT INTO LOCAL CONTENT

More efforts are being made by oil groups present in the region, such as TotalEnergies EP, Perenco, Eni, Schlumberger and Wing Wah, to develop Local Content. But the general consensus that emerged from the ensuing debate was that these companies still need to do more by taking into account the development of Local Content throughout the industry's value chain. In addition, many speakers pointed to the issue of the availability of qualified local labour for specific jobs in the industry. The session focused on the employment and training of nationals in the oil and gas sector. It provided an opportunity for oil and gas companies to showcase their in-house offerings for training the local workforce. These companies offer short-term or long-term training courses, leading to certification, within the framework of in-house training centers, or in collaboration with specialized universities. Also, Congolese public universities such as Marien Ngouabi University and Denis Sassou Nguesso University offer or plan to offer courses in the field. At the end of the meeting, the participants made important recommendations, in particular relating to the creation of a monitoring and evaluation body for Local Content with a legal and/or contractual framework conducive to the development of Local Content, the establishment of a fund to finance local companies and a training institute for petroleum professions. A second round table on Local Content has already been set to take place, according to the words of the Minister of Hydrocarbons, Bruno Jean Richard ITOUA, next year in the seaside town of Pointe-Noire.

APPO at the Egypt Energy Show *EGYPES 2024*

THE 7TH EDITION OF THE EGYPT ENERGY SHOW, EGYPEES, STARTED ON MONDAY, FEBRUARY 19, 2024, WITH A SPECIAL OPENING CEREMONY PRESIDED OVER BY THE PRESIDENT OF THE ARAB REPUBLIC OF EGYPT, H.E. MR. ABDEL FATTAH EL SISI. THE MAIN THEME OF THIS EDITION WAS: «DRIVING THE ENERGY TRANSITION, SECURITY AND DECARBONIZATION».

CONFERENCES



At the invitation of H.E. Tarek El Molla, Minister of Petroleum and Mineral Resources of the Arab Republic of Egypt, APPO Secretary General, Dr. Omar Farouk Ibrahim, led a delegation to EGYPEES 2024. The APPO SG took part as a panelist in the session «Ensuring Sustainable and Affordable Energy for All» at the conference during which APPO's position on the global Energy Transition was highlighted. Furthermore, at a special session introduced for the first time in 2024 by the organizers of EGYPEES in recognition of the increasing importance of Africa in the global Energy Transition discourse, titled Africa Dialogue, the APPO SG delivered a keynote address where he identified the imminent challenges that the Energy Transition pose to the African oil and gas industry in particular and the energy sector in general. Speaking on the challenges facing the continent Dr Farouk noted that funding, technology and human capacity development as well as energy infrastructure and markets development constitute imminent challenges that Africa needs to

address in the wake of the Energy Transition. He emphasized that if these challenges are not addressed with speed, Africa risks losing the over 120 billion barrels of proven crude reserves and over 650 trillion cubic feet of gas that it has at a time when the continent has largest proportion of its population living without access to energy.

MAKING EGYPT A REGIONAL ENERGY HUB

Ministers in charge of Energy, Industry stakeholders, CEOs of the world's major energy oil and gas companies, were among the personalities who took part in this conference. 120 States, including APPO Member Countries, took part in the important annual gathering. At the opening, a documentary film was shown to highlight the importance of the energy sector and the Energy Transition process, with the multiple developments that are available in this field. The vision is to make Egypt a regional energy hub, in harmony with the government's vision Egypt 2030.

*H.E. Dr Omar Farouk Ibrahim
SG/APPO*



OPEC AFRICA ENERGY DIALOGUE

On the sidelines of EGYPES 2024, OPEC and Africa exchanged views on a range of key energy issues at the 2024 OPEC-Africa Energy Dialogue held on February 19 in Cairo, Egypt. H.E. Dr. Omar Farouk Ibrahim stressed the fact that the high-level meeting provides a platform for stakeholders to reaffirm their commitment to advancing the energy agenda in Africa and explore innovative solutions. He stressed the importance of fostering partnerships, leveraging technology, and mobilizing resources to accelerate progress towards achieving universal access to energy and promoting inclusive growth across the continent. The APPO SG remains optimistic about the transformative potential of collective action and collaboration to tackle energy poverty and advance sustainable development in Africa. Dr Abdul-Hamid Mustapha, President of the Africa Refiners' and Distributors' Association, ARDA, congratulated OPEC for its continued leadership in promoting the OPEC-Africa Energy Dialogue and reiterated ARDA's commitment to working with OPEC and other key partner organizations, like APPO and the African Union Commission, to deliver a robust, sustainable, intra-African oil and gas industry focused on delivering cleaner

fuels and value-added petroleum products via a lower-carbon footprint. In his remarks, HE Haltham Al Ghais, Secretary General of the Organization of the Petroleum Exporting Countries, OPEC, posited that "Dialogue with Africa is a key pillar in OPEC's global energy dialogue programme which includes many other key regions, countries, and international organizations" adding, "We at OPEC firmly believe that cooperation and dialogue among all energy stakeholders are absolutely essential factors in effectively addressing our common energy challenges." Contributing to the dialogue HE Dr Amani Abou-Zeid, the African Union Commissioner for Energy, Infrastructure and Digitalization, stressed that "we always need to consider Africa's context as analysis shows that the African Energy demand could increase by 30% -compared to 10% in global energy demand- by 2040. Access to reliable, affordable, and clean energy in Africa remains the priority for the continent, calling for concessional finance and investments for more generation, production, interconnections, local transformation and domestic trading of our energy resources in consideration of the AFCFTA and that to close the energy poverty on the Continent and promote growth and wellbeing". The next Meeting of the OPEC-Africa Energy Dialogue shall be held in 2025.



ECOMOF 2024

Promoting the Mining and Petroleum Sectors for Development in the ECOWAS Region

THE 4TH EDITION OF THE ECOWAS MINING AND PETROLEUM FORUM (ECOMOF) WAS HELD IN COTONOU FROM 22 TO 24 FEBRUARY 2024. RESPONDING TO THE INVITATION OF H.E. SAMOU SEÏDOU ADAMBI, MINISTER OF ENERGY, WATER AND MINES OF THE REPUBLIC OF BENIN, THE SECRETARY GENERAL OF APPO LED A DELEGATION TO THE 4TH EDITION OF THIS IMPORTANT FORUM FOR THE INSTITUTION AND ITS MEMBER STATES.

Benin was honored to host the fourth meeting of the Member States of the Economic Community of West African States (ECOWAS), on topics relating to the sustainable development of the mining and hydrocarbons sectors in the West African sub-region. Focusing on the theme «Geo-extractive resources and technologies: what pooling strategies for the creation of added value in West Africa?», the various exchanges aimed to underline the importance of making the mining and oil sectors pillars of the economic and social development of West African States. To this end, the Forum advocates the development of attractive policies for investors and the significant contribution of these sectors to government revenues. The opening ceremony was held in the Red Room of the Palais des Congrès in Cotonou, under the chairmanship of the Minister of State Abdoulaye Bio Tchané, representing the President of the Republic of Benin, H.E. Patrice Talon.



Opening Ceremony



H.E. Samou Seïdou ADAMBI, Minister of Energy, Water and Mines of the Republic of Benin

A MEETING OF PROFESSIONALS FROM THE SUB-REGION

ECOMOF 2024 brought together key stakeholders from the mining and petroleum sectors as well as government decision-makers from the Economic Community of West African States (ECOWAS) with High-Level Ministerial delegations from its Member States. The specific objective of the Forum was to promote sustainable socio-economic development by putting into perspective the potentialities of the States of the West African sub-region, while promoting the establishment of strategic partnerships, in order to stimulate innovative investments. To achieve this result, sessions to share experiences and debates on current issues in the mining sectors, conferences were organized. Thus, in a high-level panel in which he took part, Dr. Farouk shared the vision of the APPO on the theme: pooling policies to increase the added value created by the exploitation of geo-extractive resources.

ECOWAS RENEWS ITS COMMITMENT TO THE PROMOTION OF MINING AND OIL

The Cotonou meeting was a solemn occasion for ECOWAS to reaffirm its leadership in the promotion of mining and petroleum, vital resources for the development of its Member States. Thus, in addition to the formal sessions, a space for bilateral meetings of professionals and decision-makers and for the signing of partnerships has been set up, as well as an exhibition hall for the organizations and companies represented. Created on 28 May 1975, the West African organisation, whose members include the following APPO countries: Benin, Côte d'Ivoire, Ghana, Niger, Nigeria and Senegal, has a mandate to promote economic integration in all areas of activity of its member countries. The Cotonou Forum comes after three successful editions respectively in 2015 in Ghana, 2018 in Côte d'Ivoire and 2022 in Niger.

Investing in Africa's Future

APPO at the Nigeria International Energy Summit 2024

CONFERENCES

IN THE HEART OF NIGERIA, ABUJA, THE AFRICA PETROLEUM PRODUCERS' ORGANIZATION (APPO) MARKED ITS INFLUENTIAL PRESENCE AT THE NIGERIA INTERNATIONAL ENERGY SUMMIT (NIES) 2024.



APPO's booth at NIES

Orchestrated with precision and strategic foresight, the NIES unveiled a showcase of commitment, innovation, and partnership that resonated throughout the event's corridors. As a convener of thought leaders, industry innovators, and policy makers, the NIES 2024 stood as a testament to the role of energy in shaping our world. The summit unfolded as a canvas, where APPO painted its vision, challenges, strategies, and solutions through a tapestry of dialogues, presentations, and engagements.

KEYNOTE AND PANEL PARTICIPATION

The Summit's proceedings were graced by the insightful keynote address of APPO's Secretary General, His Excellency Dr. Omar Farouk Ibrahim, on its inaugural day. Held at the State House in Abuja, Nigeria, Dr. Ibrahim's address was a beacon, guiding the summit's narrative towards sustainable energy development, collaboration, and the critical

role of African nations in the global energy landscape. His participation in a panel discussion reiterated APPO's stance on navigating the complexities of the energy sector with agility, innovation, and partnership. The narrative continued on Day 3, with Mrs. Temilola George, Head of Energy Studies Unit at the APPO Secretariat, stepping into the spotlight at the International Conference Centre. Representing the Secretary General, her remarks echoed the foundational pillars of APPO - energy security, economic growth, and sustainable development, underpinning the organization's dedication to not just addressing the challenges but spearheading transformative solutions for Africa's energy sector. Declaring the Summit open, President Bola Ahmed Tinubu, represented by Minister of Information and National Orientation, Mohammed Idris Malagy, commended Brevity Anderson, the joint organizers, with the Ministry of Petroleum Resources, of the NIES series for sustaining and growing the platform since it was started in 2017.

In his remarks at the occasion, Minister of State for Petroleum Resources (Oil) of the Federal Republic of Nigeria, Senator Dr. Heineken Lokpobiri, expressed appreciation to President Tinubu for the support that the industry has been getting from the government and for his visionary leadership. Minister Lokpobiri expressed gratitude to the many delegates including ministers from other APPO Member Countries who participated in the Summit. Speaking at a panel session, Minister of State for Petroleum Resources, Gas, Honorable Ekpo Ekperikpe called on African oil and gas producers to see in cooperation and collaboration, the only way to address the imminent challenges that the Energy Transition pose to the African oil and gas industry. Minister Ekperikpe noted that without collaboration among African oil and gas producers to address the three imminent challenges facing the industry, namely financing, technology and human capacity development and infrastructure and markets Africa risks losing the hundreds of billions of barrels of oil reserves and hundreds of trillion of standard cubic feet of proven gas reserves as stranded assets.

Beyond the formalities of speeches and panel discussions, APPO's participation was characterized by a proactive approach to stakeholder engagement. Through a series of bilateral meetings, networking events, and informal discussions, APPO leveraged the summit as a platform to foster dialogue, exchange ideas, and cultivate partnerships. This strategic engagement was pivotal in amplifying APPO's voice, extending its influence beyond the confines of the summit, and positioning it as a central figure in shaping the future of energy in Africa and beyond. In total, the 2024 edition of the Nigeria International Energy Summit, hosted by Member Country Nigeria and organized by Brevity Anderson, was not just an event but a milestone for APPO and the broader energy sector in Africa. APPO's participation transcended traditional boundaries, driving forward a narrative of innovation, collaboration, and sustainable development. These milestones stand as a testament to the strides taken, the insights shared, and the partnerships forged, marking a significant chapter in APPO's journey towards a resilient and prosperous energy future for Africa.



*H.E. Dr Omar Farouk Ibrahim
SG/APPO*

Tackling the technology and expertise challenge in Africa

APPO inaugurates Forum of Directors of Oil and Gas Research & Development and Innovations Centers of its Member Countries

THE INAUGURAL MEETING OF THE DIRECTORS OF RESEARCH & DEVELOPMENT AND INNOVATION CENTRES OF APPO MEMBER COUNTRIES TOOK PLACE FROM APRIL 16 TO 19 IN LUANDA, ANGOLA. TEN APPO MEMBER COUNTRIES ACTIVELY PARTICIPATED IN THIS MEETING, WHICH AUGURS WELL FOR THE FUTURE OF THE POOLING OF RESEARCH EFFORTS MADE BY MEMBER COUNTRIES.

In its quest to find solutions to the imminent challenges that the global Energy Transition poses to the African oil and gas industry, APPO on April 16-19 2024 inaugurated a Forum of Directors of Oil and Gas Research & Development and Innovation Centers of its Member Countries. The inaugural and technical meetings which lasted 3 days was hosted by the Centro de Desenvolvimento e Pesquisa (CPD), the Research Center of Sonangol, the National Oil Company of APPO Member Country, the Republic of Angola. The Meeting was an intense moment of exchange of experiences and networking among Directors and other senior researchers of Research & Development and Innovation centers in Member countries. The participants had the opportunity to share their achievements and prospects in the field. The technical meeting reviewed the level of

advancement in oil and gas research in various Member Countries, the challenges faced and the prospects. The meeting agreed with the findings of the study on the future of the Oil and Gas industry in Africa in the light of the Energy Transition that individually, no one African country has all that it takes to master the complete value chain of the industry, but that when they cooperate and collaborate, they can surmount the hurdle. Towards this end, the Directors agreed to develop a model of cooperation and collaboration in oil and gas research, which recognizes the imperative of collaboration among the continent's oil and gas research institutions, in view of the huge costs involved in setting up world class research institutions. The Directors visited the Sonangol Refinery where they were conducted round the various laboratories and simulation centers.

A DAY IN SONANGOL'S RESEARCH AND DEVELOPMENT CENTRES

The site visits took place on Wednesday, April 17, 2024 in the city of Luanda. On this occasion, the delegation was able to visit the Sonangol Refinery (Sociedade Nacional de Combustíveis de Angola, EP), the Central Laboratory and the laboratories of the Higher Polytechnic Institute of Technology and Sciences. At each step, the research and development facilities and mechanisms were presented to visitors, who were very curious to understand the different processes put in place. Sonangol is a national company whose mission is to exploit and produce oil and natural gas in Angola.



Family photo of the participants at the inaugural Forum

The visit to its refinery in Luanda allowed the various delegations to discover the refinery's facilities and the laboratories of this refinery. These facilities are used to analyze solid, liquid and gaseous products. Then, the participants visited a structure dedicated solely to research, the Sonangol Central Laboratory. Also located in Luanda, this center conducts upstream, downstream and midstream studies of the industry. The visits ended with the laboratories of the Higher Polytechnic Institute of Technology and Sciences. It is a real incubation center, which offers several training courses, including training specific to the oil and gas field. At each stage, the Secretary General praised the quality of the facilities. He also inquired about the degree of openness of the various centers to incubators in other African countries. He did not fail to insist on the need for the various research and development centers to join forces with other institutions in other APPO Member Countries in order to strengthen their intervention capacities.

THE RESEARCH DIRECTORS' FORUM AS A CATALYST FOR TECHNOLOGICAL DEVELOPMENT

The meeting itself was held on 18 and 19 April in Luanda. In his remarks, the Secretary General of APPO, H.E. Dr. Omar Farouk Ibrahim expressed his gratitude to the President and CEO of Sonangol for hosting two meetings of NOC CEOs and this inaugural meeting of the APPO R&D and Innovation Directors Forum. He also stressed that technological development in Africa's oil and gas industry can only be a reality if Africans unite to set up centers of excellence at the regional level. Sonangol's Chairman and CEO, Mr. Sebastiao Gaspar Martins, reaffirmed his company's commitment to continue supporting the industry and investing in R&D. He appreciated the efforts made by APPO in establishing this Forum as a catalyst for technological development. Proceeding to the official opening of the meeting, Ingr. José Barroso, Secretary of State for Oil and Gas, representing H.E. Dr. Azevedo Pedro Diamantino, Minister of Mineral Resources, Petroleum and Gas of Angola, welcomed the initiative of the forum. He did not fail to mention the crucial role of the oil and gas industry in the economies of Member Countries and the role of Research and Development in the industry especially in this era of Energy Transition when the countries on whom Africa has been dependent for oil and gas technology and expertise have resolved to abandon the industry.

TOWARDS THE INAUGURATION OF A TEMPLE DEDICATED TO RESEARCH IN ANGOLA

The Directors of the R&D and Innovation Centers of the NOC, the leaders and representatives of the Member Countries which are Algeria (Sonatrach R&D Center), Angola (Sonangol R&D Center), Chad (Ministry), Congo (SNPC), Côte d'Ivoire (PETROCI RAC), Equatorial Guinea (GePetrol), Gabon (GOC), Ghana (GNPC R&D Center), Senegal (PETROSEN) and South Africa (SFF) took part in the meeting. Apart from the speeches, the opening ceremony was marked by the screening of a documentary dedicated to the presentation of the ambitious project to set up a research center in Sumbe, Angola. Scheduled to be inaugurated in the second half of this year, Sonangol's Research and Development Center (RDC) is dedicated to research and development in the fields of hydrocarbons, renewable energy, hydrogen, biofuels and minerals for electric cars. Located on a perimeter of 63 hectares, the CPD will also be devoted to high-level specialized training and postgraduate education.

DEVELOPING A PLATFORM FOR COOPERATION

The work of the forum, under the leadership of Dr. Vladimir Machado, General Manager of the Sonangol R&D Centre, focused on several themes addressed in the form of panels. For example, representatives of Member Countries presented their experiences with research programmes, the facilities already in place and the collaboration they have established with each other and with academia so far, as well as the solutions required for the oil and gas sector in Africa. The meeting also discussed objectives, programmes, synergies, and common challenges. Options and strategies for the modernization of laboratories and the development of workforce expertise were also examined, as well as strategies to be put in place to improve innovation and technological development in their scope, role, and mandate. Participants identified best practices and strategies for linking research to the manufacture and commercialization of innovation and research results. Finally, fruitful discussions were held on collaboration through the establishment of joint projects and activities. The participants parted ways with the firm resolve to continue the exchanges, pending a next meeting which should take place in February 2025 in Algeria.

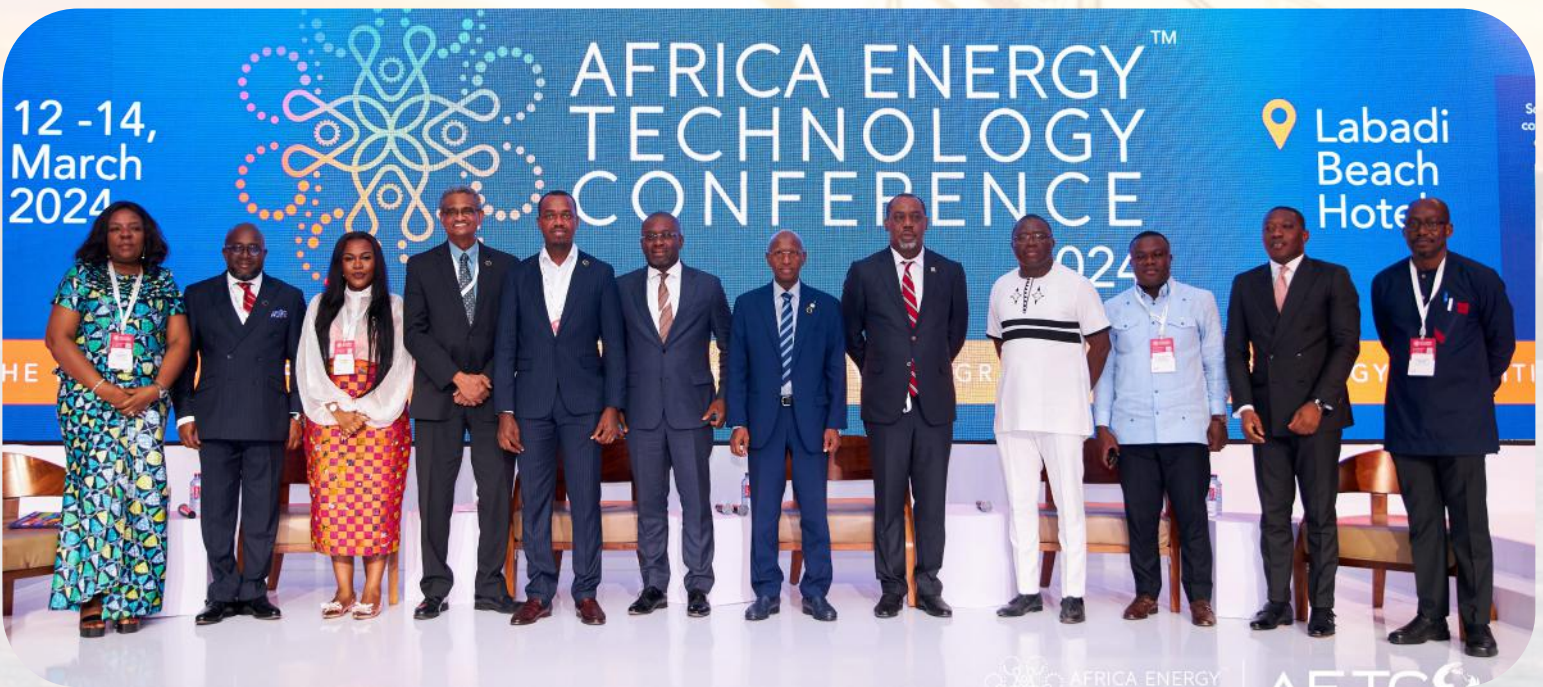
Maiden edition of the Africa Energy Technology Conference in Accra

AETC-2024

APPO calls for prioritizing energy access for the African continent

THE CURTAINS FELL ON MARCH 13 ON THE FIRST EDITION OF THE AFRICA ENERGY TECHNOLOGY CONFERENCE. THE TWO-DAY CONFERENCE BROUGHT TOGETHER GOVERNMENT REPRESENTATIVES, POLICYMAKERS, ENERGY TECHNOLOGY AND OIL & GAS GIANTS. THE APPO SECRETARY GENERAL CALLED FOR SYNERGY OF ACTION, SO THAT AFRICAN COUNTRIES CAN TAKE ADVANTAGE OF THE ENERGY TRANSITION, NOT AS A CONSTRAINT BUT AS AN OPPORTUNITY.

CONFERENCES



Is the priority for Africa to guarantee access to energy for its nearly one billion inhabitants who are deprived of it, or to quickly transit away from fossil fuels? This was the main question on the table of the Africa Energy Technology Conference held in Accra on 12 - 13 March. Organized by the Africa Energy Technology Center in collaboration with Ghana's Ministry of Energy, the conference discussed investment and collaboration opportunities to put Africa at the forefront of energy technology. The various addresses and panels brought together the who's who of African personalities, specialists in energy issues. It emerged from the declarations and debates that Africa must be able to seize the opportunity of the energy transition to take full control of the funding, technology, and markets of the energy

industry on the continent.

APPO COMMITTED TO A JUST ENERGY TRANSITION

The question of investment and sponsorship opportunities for a Just Energy Transition was at the center of the debates. Speaking at the opening ceremony, the Secretary General highlighted the challenges facing the energy sector in Africa, as identified by a study conducted by APPO. First, there is the issue of financing the oil and gas industry in Africa. While the continent has long been dependent on foreign funds, African countries have decided to provide a solution to this problem, by setting up the African Energy Bank, the creation of which Dr. Farouk announced will be completed in 2024.

Regarding the other two challenges identified, namely the issue of technology and the issue of infrastructure and markets, Dr. Farouk explained that they relate to Africa's inability to develop its own technology, noting that most of the oil and gas produced on the continent is still exported. As a solution, APPO has created a framework for cooperation between research stakeholders as well as a forum for the heads of the various National Oil Companies.

BUILD A COLLABORATION AND PARTNERSHIPS TO DRIVE AFRICA TOWARDS A SUSTAINABLE ENERGY FUTURE

Partners such as the African Petroleum Producers' Organization, World Energy Council (Africa Region), African Energy Chamber, SPE Ghana Section, played pivotal roles in shaping the conference's agenda and facilitating meaningful engagements. The Minerals Income Investment Fund (MIIF), Volta River Authority (VRA), Tullow Ghana, Ghana National Gas Company Limited, Kosmos Energy, and the National Petroleum Authority just to mention a few also made significant contributions, underscoring their commitment to driving sustainable energy initiatives. Honorable Dr. Matthew Opoku Prempeh, the Minister of Energy for Ghana, delivered a keynote address, emphasizing the importance of collaborative efforts to address energy challenges and promote sustainable development. His remarks echoed the conference's theme of Africa leading the charge in energy technology and policy integration. Ms. Emelia Akumah, the Founder and President of the Africa Energy Technology Centre (AETC), delivered an address that resonated with participants at the AETC Annual Conference 2024. With a fervent commitment to advancing energy innovation and sustainability across the continent, Ms. Akumah's remarks underscored the pivotal role of collaboration and inclusivity in driving Africa's energy transformation. She also emphasized the imperative of harnessing technology and policy integration to catalyze a Just Energy Transition in Africa. She highlighted the AETC's mission to serve as a catalyst for change, empowering stakeholders to embrace renewable energy solutions, enhance energy access, and mitigate environmental impact.

RICH PANELS AND LIVELY DEBATES

The Africa Energy Technology Conference presented about twenty panels during which different themes were discussed. Speaking at the first session, in plenary,



Public View at AETC

the APPO Secretary General noted that it is not the time for Africa to abandon fossil fuels. «We need more gas and more oil,» he said, stressing that Africa will drive its Energy Transition at its own pace, and in whatever way it chooses. If the West needs to decarbonize, says Dr. Farouk, Africa needs to industrialize. To do this, African countries must be able to meet the challenge of domesticating their oil and gas, especially since Africa is, moreover, the least polluted and therefore the cleanest continent. Dr. Farouk also stressed the need for African countries to come together to meet the challenges, because, he said, no country will be able to do it alone. It is therefore a question of synergizing efforts. Finally, he praised the vision of pan-African pioneers, including Ghana's Kwame Nkrumah, to whom he paid tribute. Various other panels also addressed the issue of nuclear power in Africa as well as those relating to the financing of the sector, the important role of gas in the transition process, as well as the applications of artificial intelligence to optimize upstream oil production. All these exchanges have made it possible to resolve the initial question, namely that Africa must first and foremost seek to guarantee access to energy for its inhabitants. And if, while doing so, it can drive its Energy Transition, it will. The main thing for it is to ensure the financial independence of its energy projects through the pooling of resources. From this point of view, the advent of the Africa Energy Bank was unanimously hailed by the participants as the panacea that will allow the continent to make the most of its natural resources, while exploiting them in a sustainable way.

APPO Secretary General visits Libya

AN APPO SECRETARIAT DELEGATION LED BY SECRETARY GENERAL, HIS EXCELLENCY DR. OMAR FAROUK IBRAHIM, PAID A MEMBER COUNTRY VISIT TO THE STATE OF LIBYA, IN JANUARY. DR. FAROUK USED THE OCCASION TO ATTEND THE ENERGY AND ECONOMY SUMMIT IN TRIPOLI, LIBYA, THE FIRST MAJOR OIL AND GAS EVENT IN THE COUNTRY IN OVER A DECADE.

CONFERENCES

At the Ministry of Oil and Gas where the APPO delegation was received by the Libyan Minister of Oil and Gas, His Excellency Mohamed Oun, and his top aides, discussions centered on developments in the Libyan oil and gas industry as well as cooperation and collaboration among APPO Member Countries in tackling the imminent challenges that the global energy transition poses to African countries. Minister Oun commended the APPO Secretary General and his team for the professionalism they have brought to APPO since the reform from APPA and for their commitment to excellence. The team was also received in audience by the Prime Minister His Excellency Abdelhamid Dbeibah, where discussions revolved around what APPO is doing to tackle the challenges that the energy transition poses to APPO Member Countries. Dr. Farouk briefed the Prime Minister about the initiatives taken by the APPO Ministerial Council

including the establishment of the Africa Energy Bank, in partnership with Afrdeximbank, the establishment of the Forum of CEOs of APPO Member Countries' National Oil and Gas Companies, as well as the Forum of Directors of Research and Development Institutions. Dr. Farouk also commended Libya for its timely payment of its annual dues and appealed to the Prime Minister to support the establishment of the Africa Energy Bank by ratifying the Establishment Agreement and subscribing to the capital share early enough for the commencement of the activities of the Bank.

LIBYAN ENERGY AND ECONOMY SUMMIT 2024

A highlight of the visit was the participation of the APPO delegation in the Libyan Energy and Economy Summit 2024. This major event brought together the entire energy sector and other critical areas of the economy.



*H.E. Dr Omar Farouk Ibrahim
SG/APPO*



The objective of the Summit was to create and maintain partnerships for energy and economic opportunities. Building on the success of the inaugural edition in 2021, the summit was the first major investment event to be held in Tripoli in a decade. Libya is, in fact, a major global producer of oil and gas. Eager to increase its investments through constructive partnerships, this event is organized to bring together the world's governments and the private sector to envision a growth agenda and to conclude agreements and partnerships.

BUILDING THE NEW LIBYA ON ENERGY

The panels brought together experts in the field of energy around various themes. For example, a roundtable discussion provided an opportunity for oil and gas operators to discuss the importance of the Libyan energy industry and the projects envisaged for the industry. The objective is clear: to increase production by attracting investors upstream and exploit the country's natural gas potential. But how can we talk about energy renewal without mentioning the essential role of renewable energies in supporting economic growth? An entire session was devoted to this theme. It

shows that Libya has made substantial progress in the field of renewable energy over the past twelve months. Thus, the country has launched discussions with Malta to export renewable energy. The panel assessed Libya's untapped renewable energy potential, the competitiveness of its legislation, and opportunities to better encourage the private sector to invest in the sector.

UNLOCKING LIBYA'S UPSTREAM ENERGY POTENTIAL

Project financing in the upstream industry was also a focus of the summit. A panel was dedicated to identifying solutions to attract private sector investment across the value chain. To achieve this, projects need to be competitive and bankable by forging new partnerships with international lending institutions. Finally, about energy trends in North Africa, Libya wants to be at the service of the future of the industry. Thus, several areas are identified as ripe for investment and expansion, including natural gas, technology oil and gas fields and infrastructure optimization. Discussions focused on ongoing activities and upcoming projects, infrastructure investments, and the response of local and international companies to the needs of the energy sector in the future.

2nd Meeting of the APPO Forum of Directors of O&G Training Institutes

APPO poised to raise the bar on Oil and Gas Capacity Development in Member Countries

THE SECOND MEETING OF THE APPO FORUM OF DIRECTORS OF OIL AND GAS TRAINING INSTITUTES TOOK PLACE ON MAY 15 AND 16, 2024 IN ABUJA, NIGERIA. IT WAS HOSTED BY THE NNPC ACADEMY, THE TRAINING ARM OF THE NIGERIAN NATIONAL PETROLEUM COMPANY LIMITED.



The second meeting of the APPO Forum of Directors of O&G Training Institute was held under the chairmanship of the Executive Vice President (Commercial Services) NNPC Ltd, Engr Inuwa Danladi, who represented the Group CEO, Geologist Mele Kolo Kyari. Several Member Countries were represented by the Directors of their Training Institutes and the Directors of the Human Resources Departments of the NOCs and Ministries. This important meeting was the place to consolidate the foundations of the Forum launched on June 21, 2023 in Skikda, Algeria. Indeed, the main mission of APPO is to use hydrocarbons as a catalyst for energy security, sustainable development and economic diversity in Africa. The creation of the Forum of Directors of Oil and Gas Training Institutes is part of the effort by the Organization to address one of the

imminent challenges that the global Energy Transition poses to the African Oil and Gas industry, as a major study conducted by APPO revealed that technology and human capacity challenges shall become acute in Africa as the world tries to move away from fossil fuels.

A LIVELY OPENING CEREMONY

In his opening remarks, HE Dr. Omar Farouk Ibrahim, Secretary General of APPO, noted that a major study conducted by APPO on the Future of the Oil and Gas Industry in Africa in the Light of the Energy Transition has established that three imminent challenges face the industry in Africa as the world pursues the energy transition. These are the challenge of funding, of technology/expertise, and of market/energy infrastructure.

The Secretary General opined that APPO is addressing the three challenges simultaneously, noting that for the funding challenge APPO has gone into partnership with the Afreximbank to found the Africa Energy Bank, AEB. Dr. Farouk gave an update on the process for the establishment of the AEB, saying that the Establishment Agreement and the Charter of the AEB will be signed by the founding organization, namely Afreximban and APPO at the beginning of the month of June 2024. He further stated that the process for the selection of the Headquarters of the Bank has reached advanced stage as a technical team will visit and inspect the buildings that APPO Member Countries that have expressed interest in hosting the Bank have offered as Headquarters. The SG assured that the AEB shall focus on funding oil and gas projects on the African continent, particularly in APPO Member Countries. He sees AEB as filling a huge gap that has arisen due to the resolution of those on whom Africa has depended for ages for oil and gas projects funding to abandon the industry, particularly in Africa. Dr. Farouk also stated that APPO is looking into the provision of cross border and inter-regional and continental energy infrastructure to aide the energy trade among African nations. He lamented the near-non-existent energy trade among Africa nations and peoples, saying that the Central Africa Pipeline System, CAPS, which is being considered by APPO and the CABEF with the support of most Central Africa states shall transform the Central Africa energy landscape. The project, he said, shall link eleven Central Africa states by oil, products and gas pipelines. Dr. Farouk commended West Africa for the Trans Saharan Gas Pipeline and the West Africa Gas Pipeline. Speaking on the challenge of technology and expertise, Dr. Farouk highlighted that APPO established the Forum of Directors of Research Development and Innovation Centres which held its inaugural meeting in Luanda on 16-19 April 2024. The two fora are meeting places where stakeholders are to share thoughts on the challenges that oil and gas training, research and development face on the continent to come up with various models of cooperation, collaboration and resource pooling. Following him, Mr. Abdelkader Guenoune, Managing Director of the Algerian Petroleum Institute, IAP, who chaired the inaugural meeting of the Forum of Directors in Skikda, said that it is not only identifying training needs but also to devise actionable strategies that empower individuals and organizations to thrive in a rapidly

evolving landscape. Ms. Folashade Adekeye, the Director of the NNPC Academy, who assumed the leadership of the Forum on at the meeting, emphasized leveraging achievements, implementing recommendations, and promoting research and development, innovation, performance excellence, and best practices. In his remarks, Mr. Danladi Inuwa, representing M. Melo Kolo Kyari reaffirmed NNPC's commitment to continuously support the industry and investing in training. Also, he stressed, Africa must run the oil and gas industry based on the following three key words: reliability, affordability and sustainability.

INSPIRING WORK ON THE AGENDA

The meeting was conducted under the leadership of Ms. Folashade Adekeye, Director of the NNPC Academy. The participants first focused on the recommendations of the inaugural meeting held on June 21 and 22, 2023 in Skikda, Algeria. The Secretariat reported on the establishment of the Working Group with specific missions. Thus, the Chairman of the Forum presented a report followed by that of the MC's delegates on the activities implemented following the inaugural meeting. It was gratifying to see the full functioning of the Forum, since many collaborative activities were initiated, including collaborations between several Member Countries and the Algerian Petroleum Institute (IAP). About the harmonization and standardization of vocational training for technicians, the meeting stressed the need to intensify vocational training in order to provide competent technicians for the industry, while improving educational programs and adding new disciplines to meet the changing needs of the industry. Also, the Forum discussed the need for greater collaboration between industry and higher education institutions to ensure that the needs of the oil and gas industry are reflected in the curricula and disciplines taught in African universities. It also agreed on the need for O&G training institutions, R&D Centers and academia to develop postgraduate programs for the benefit of these institutions to be able to conduct postgraduate programs that are more tailored to the needs of industry. Other no less important points such as the APPO certification training and the training of trainers were also discussed. Reflections are continuing and the next meeting of the Forum is scheduled to be held in 2025 in Côte d'Ivoire.

Participation in MMEC 2024

APPO is ready for Mozambique

IN MAPUTO, DURING HIS PARTICIPATION IN MOZAMBIQUE'S PREMIER MINING & ENERGY CONFERENCE, HELD ON 2ND AND 3RD MAY 2024, HIS EXCELLENCY DR. OMAR FAROUK IBRAHIM INVITED THE COUNTRY OF HIS EXCELLENCY FILIPE JACINTO NYUSI TO JOIN APPO, TO BET OF ENERGY SECURITY FOR THE SUSTAINABLE DEVELOPMENT OF THE AFRICAN CONTINENT.

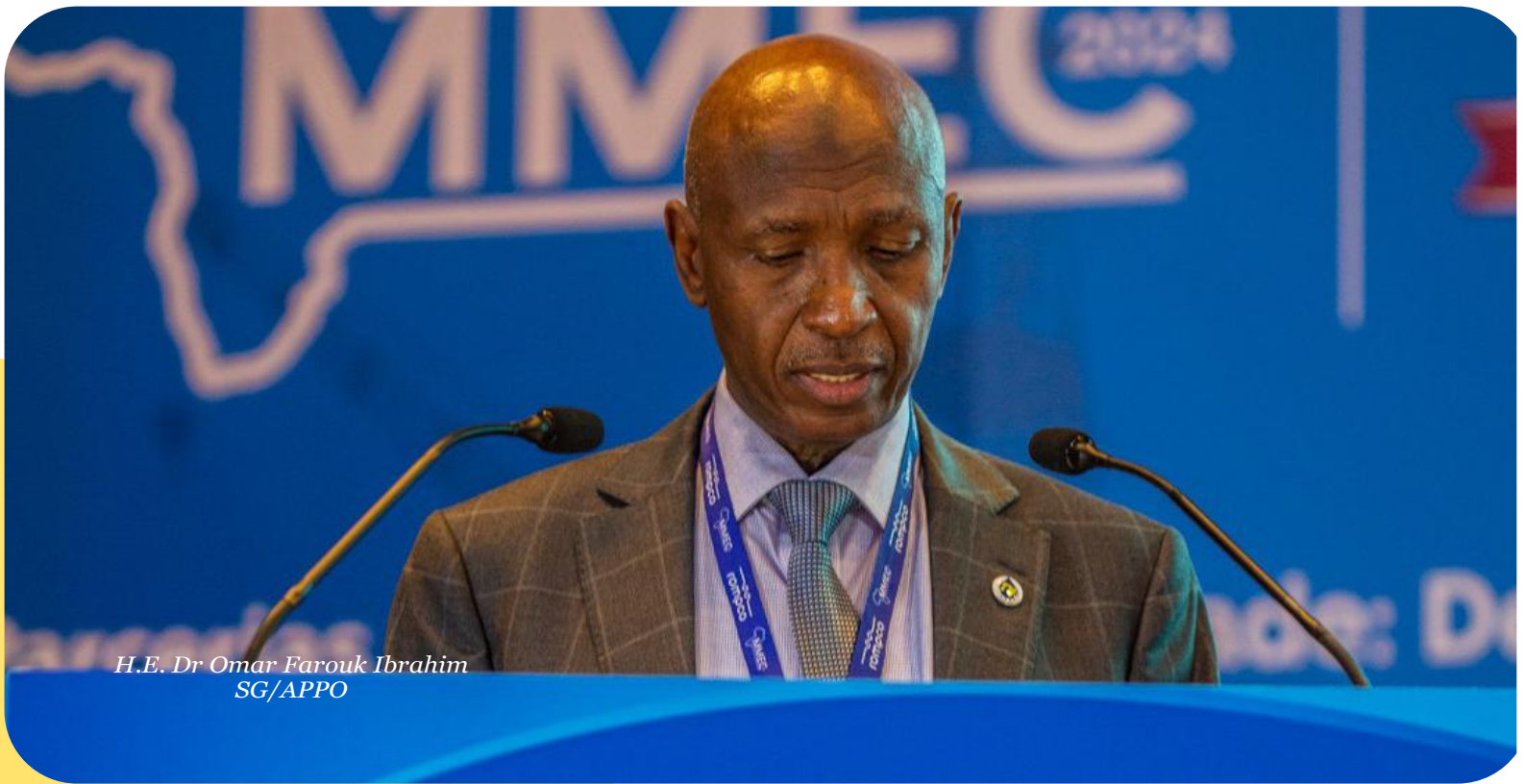


The more African countries join hands, the better they will be able to meet the challenges they face. It is with this imperative in mind that APPO remains open to the membership of like-minded countries. In his address at the opening ceremony of Mozambique's Premier Mining & Energy Conference, Dr. Omar Farouk Ibrahim invited Mozambique to join the reference oil & Gas Organization in Africa. Lamenting the fact that, for too long, African countries have been forced to abandon their neighbors and seek partnerships abroad, even when their neighbors could provide what they were looking for, the SG welcomed the changes underway, for the better on the continent. He also indicated that Mozambique's accession can only bring significant added

value, contributing to the pooling of resources for the control of the continental oil and gas industry.

APPO AND ITS MEMBER COUNTRIES ON THE FRONT LINES

The SG made it known that APPO does not dispute the science of climate change, not because it believes in it, but because it is not able to prove that everything that is put forward is false. To meet the challenge, he said, Africa, with its 125 billion barrels of proven oil and more than 600 trillion cubic feet of proven gas reserves in the ground, with the largest proportion of its population living in energy poverty, cannot afford to abandon these resources.



*H.E. Dr Omar Farouk Ibrahim
SG/APPO*

The continent must, on the contrary, be able to take full control of all industry activities, from financing to technology to energy market infrastructure. On these different aspects, the APPO has taken concrete measures. To address the financing challenge, the Organization has partnered with Afreximbank to create the African Energy Bank. Regarding the challenge of technology and expertise, the SG said that APPO and the national oil and gas companies in Member Countries are working to establish regional centres of excellence in various sectors of the oil and gas industry. The Forum of NOC CEOs, the Forum of Directors of Oil and Gas Research, Development and Innovation Centres and the Forum of Directors of Oil and Gas Training Institutions are part of this dynamic. Finally, on markets, he emphasized that APPO is committed to creating the energy infrastructure that will facilitate the flow of energy across borders, regions and the continent. Dr. Farouk cited the trans-Saharan and West African gas pipeline projects as support. He also referred to the Central African Pipeline System (CAPS), a project that will connect eleven Central African states through crude, product and gas pipelines, and for which APPO is partnering with CABEF.

STOP PLAYING THE INDIGENT !

His Excellency the SG of APPO's speech was a heart-

felt cry to the African people, especially their representatives in the global climate change negotiations. «Stop being beggarly!» said Dr. Farouk. In his opinion, Africans should no longer impatiently hope for a pittance from the countries of the North that have destroyed the atmosphere, a common heritage of all humanity, by polluting it with more than 2,500 gigatons of emissions over a period of 150 years. « Instead of looking forward to receiving assistance in the form of climate finance, by any name you call it: adaptation and mitigation or loss and damage, ask the countries that created the mess to use the climate fund to clean the mess they had created,» the SG advises. The methodology he suggests is to invest these funds in technologies that will be used to remove carbon from the atmosphere. For him, removal of only 25% of legacy emissions will make it possible to avert the imminent danger that the world is facing today. Africa will then be able to use its fossil fuel to industrialize. «We should not be deceived into believing that renewable energies can industrialize Africa, not in this century» Dr Farouk concluded. The request for Maputo to join the APPO was reiterated during an audience with Mozambique's Minister of Mineral Resources and Energy, His Excellency Carlos J. Zacarias. The latter did not fail to express his full support for the creation of the Africa Energy Bank. Before leaving Mozambique, the APPO delegation visited the Maputo gas-fired thermoelectric power plant.

26th World Energy Congress in Rotterdam

Redesigning Energy for People and Planet

CONFERENCES

HELD 22 TO 25 APRIL 2024 IN ROTTERDAM, THE NETHERLANDS, THE 26TH WORLD ENERGY CONGRESS WAS CO-ORGANIZED BY THE MINISTRY OF ECONOMIC AFFAIRS AND CLIMATE POLICY OF THE NETHERLANDS AND THE WORLD ENERGY COUNCIL (WEC). DURING THE CONFERENCE, PARTICIPANTS FROM DIVERSE BACKGROUNDS ENGAGED IN IMPORTANT DISCUSSIONS, SHARED IDEAS AND FORGED PARTNERSHIPS THAT ARE LIKELY TO CATALYZE CHANGE AROUND THE WORLD ENERGY SCENE.

The Secretary General of the APPO, who doubles as Regional Chair of WEC for Africa, H.E. Dr Omar Farouk Ibrahim, led the African delegation to the 26th edition of the World Energy Congress. Together, the participants addressed the central issue of Redesigning Energy for People and Planet. Each session echoed the urgency of this task, and the strategies discussed promise not only to transform energy systems, but also to ensure a sustainable and equitable energy future for all. The participation and commitment of all was essential, whether by participating in a panel, presenting the innovations in the exhibition hall, or participating in the bilateral meetings always focused on the theme of the congress. The world was invited to push boundaries and drive

change, ensuring that the ideas and commitments forged at the congress led to tangible action.

AFRICA FOR A JUST AND EQUITABLE TRANSITION

The APPO Secretary General, in his capacity as Chair of the World Energy Council (WEC) for Africa, presented Africa's position on the Energy Transition. His Excellency Dr. Omar Farouk Ibrahim stressed that Africa is not against the Energy Transition but cannot move at the same pace as other continents already developed in this race towards renewable energy, as Africa cannot get out of poverty in all its forms without energy, especially fossil energy for its industrialization.



The African continent is therefore not ready to abandon its wealth, oil and gas, here and now for a quest from for renewable energy. He said that those responsible for contemporary and legacy greenhouse gas emissions into the atmosphere, which are developed countries, say they want to give Africa funds for climate, mitigation, adaptation, loss and damage, provided it stops using the resources it has, namely fossil fuels.

FINDING ALTERNATIVES TO THE ABANDONMENT OF FOSSIL FUELS

Unlike developed countries, for which the Energy Transition only poses problems of comfort, the African continent faces existential challenges, says Dr. Ibrahim. He therefore delivered Africa's message that the world should consider all possible options to address the climate challenge, the main one being to continue the development and deployment of C D R technologies,

which will make oil and gas more environmentally friendly. Dr Ibrahim called on the developed countries who have been largely responsible for today's climate challenge to commit to developing and deploying CDR technologies and removing 20 to 25 percent of the 2500 gigatons of emissions that their industrialization has emitted into the atmosphere. He argued that when 20% of the emissions are removed



the atmosphere, it will provide African an opportunity, to use fossil fuels to equally industrialize and raise the living standards of its people. According to Dr Ibrahim, renewables cannot provide Africa with the energy it shall require to industrialize and lift its people from poverty in the short to medium term. The World Energy Congress welcomed nearly 7,000 delegates and 100 exhibitors on 30,000 m² of exhibition space. It attracted approximately 18,000 participants over four days, including ministers and representatives from more than 150 countries around the world.

APPO Roundtable on Gas Flaring and Fugitive Methane Emissions

APPO is committed to sustainable and environmentally friendly exploitation of oil and gas by its Member Countries

APPO Member Countries are working to reduce gas flaring and methane emissions in their operations both for the good of their own people and for the good of humanity. This was the leitmotif that prevailed during the two-day roundtable devoted to the issue, in Accra, on 21 and 22 May. The meeting was organized by the APPO Secretariat in collaboration with the Ghana Petroleum Commission. The roundtable began with a site visit to some selected industry facilities in Ghana. These are the Sunon Asogli Power Plant and the Tema Oil Refinery. The plenary session then started with an opening ceremony, during which the Secretary General of APPO, H.E. Dr. Omar Farouk Ibrahim commended the efforts of Member Countries to reduce gas flaring and fugitive methane emissions in their operations. He invited participants to prioritize the interests of the nearly one billion Africans, mostly in sub-saharan Africa, who do not have access to modern energy in

their decision-making. In this sense, he said, the recovered methane as well as the flared gas will have to be used to improve the energy situation on the continent.

A PRIORITY AREA OF REFLECTION FOR APPO

The initiative of this roundtable comes in response to several requirements related to environmental protection, and aimed at ensuring the continuity of oil and gas exploitation in environmentally friendly conditions, to finance the budgets of the various countries with oil and gas resources. APPO Secretariat, based on the provisions of the APPO Framework Agreement on Cooperation and Mutual Assistance and its Long-Term Strategy, among Member Countries, initiated a number of platforms for exchange and sharing of experiences and strategies, cooperation and collaboration in various areas of the industry to meet the challenges posed by the Energy Transition.



It was therefore natural to see that reducing gas flaring and fugitive methane emissions are among the priority pathways for the oil and gas industry to contribute to the reduction of GHG emissions and the mitigation of climate challenge. Thus, the APPO NOC CEO Forum resolved that investments in the oil and gas sector must continue in a context of the industry's improvement of its environmental credentials and the reduction of emissions.

A MEETING OF PROFESSIONALS AND SPECIALISTS

The objective of organizing this roundtable is to update participants on the latest developments and strategies on how to minimize gas flaring and methane emissions in oil and gas industry operations. In addition, the roundtable provided a platform to review case studies and best practices, exchange knowledge and experiences, and formulate a common strategy for reducing emissions to ensure that Africa's oil and gas resources continue to be developed in a sustainable manner. The roundtable brought together experts and operators from the oil and gas industry. These come from ministries in charge of hydrocarbons, national oil companies, oil and gas service companies, energy regulators and universities, among others.

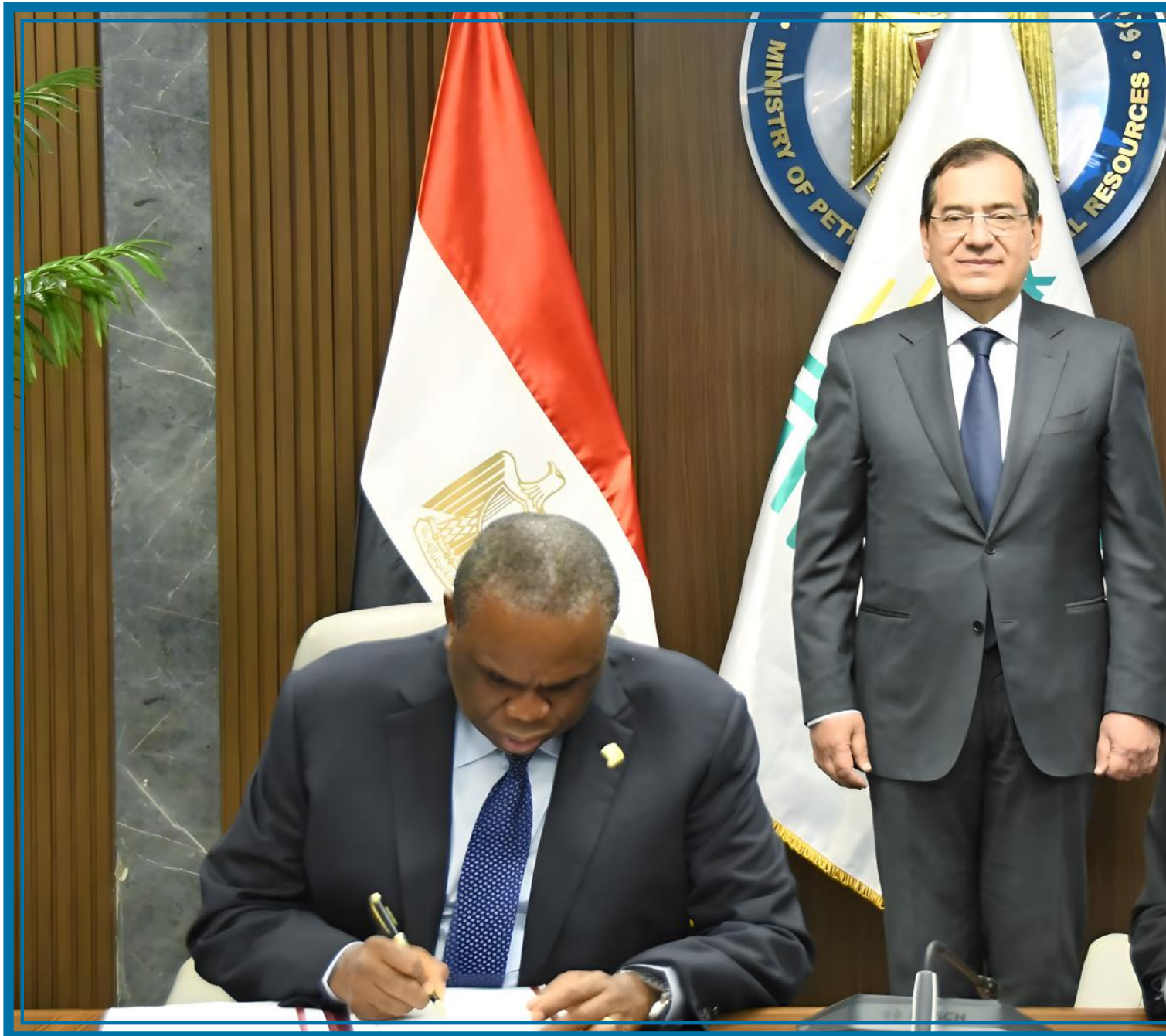
The working session was presented in seven sessions, inaugurated by a ministerial panel on government strategies to eliminate routine gas flaring and methane emissions. Other sessions focused on the role of regulatory frameworks and regulators in controlling gas flaring and methane emissions, options for reducing gas flaring and monetizing associated gas, measures to eliminate fugitive methane emissions and gas flaring and detection, monitoring and quantification of methane emissions. One session was devoted to case studies on member countries' approaches to managing gas flaring and methane emissions. The final panel provided an opportunity to present operators' views on gas flaring and methane emissions management. Delegates and participants from APPO Member Countries reaffirmed their commitment to addressing the challenges of gas flaring and fugitive methane emissions, through collaborative efforts, robust policies and innovative solutions, aimed at protecting the environment, optimizing resource use and contributing to global climate change mitigation efforts. They invited industry players to join this imperative effort.

The Ceo of GPC, Mr. Egbert Faibille Jnr, while welcoming delegates to the Roundtable, stressed the importance of cooperation and collaboration among African Oil and Gas producers in tackling common challenges bedeviling the industry in the continent. He commended the efforts of APPO for mobilizing many Oil and Gas producing countries to come to Ghana to address the common challenge of gas flaring and fugitive methane emissions. Faibille Jnr emphasized the key role of industry regulators in the march to sustaining the African Oil and Gas industry in the era of the Energy Transition.



AFRICA ENERGY BANK

History is made as Afreximbank and APPO sign Establishment Agreement and Charter of the Bank



AFRICAN STATES ARE FINALLY TAKING CHARGE OF THEIR DESTINY IN TERMS OF FINANCING THE EXPLOITATION OF THEIR OIL AND GAS RESOURCES. THIS IS THE MEANING TO BE GIVEN TO THE HISTORIC SIGNING CEREMONY, WHICH MARKS THE FORMAL COMPLETION AND ACCEPTANCE OF THE FOUNDING DOCUMENTS OF THE AFRICA ENERGY BANK BY THE BANK'S TWO FOUNDING INSTITUTIONS, THE AFRICA EXPORT-IMPORT BANK, AFREXIMBANK AND THE AFRICAN PETROLEUM PRODUCERS' ORGANIZATION, APPO.

The ceremony was chaired by H.E. Eng. Tarek El Molla, Minister of Petroleum and Mineral Resources of the Arab Republic of Egypt. APPO and Afreximbank signed the Establishment Agreement and the Charter of the AEB, declaring them open for signature and ratification by the 18 APPO Member Countries. Prof. Benedict Oramah, President and Chairman of Board of Directors of Afreximbank and Dr. Omar Farouk Ibrahim, the Secretary General of APPO signed the Establishment Agreement and the Charter of the Africa Energy Bank on behalf of their respective institutions. The signing ceremony concludes two years of negotiations and preparations by the two parties having signed a Memorandum of Understanding in May 2022 towards the establishment of the AEB. The AEB was created to address the funding crisis in the African oil and gas industry, triggered by the global energy transition. Traditional financiers, on whom Africa has relied for decades, are withdrawing support, particularly in Africa, citing climate change concerns as the primary reason.

A HISTORIC DAY FOR THE CONTINENT

H.E. Eng. Tarek El Molla, who is also a Member of the APPO Ministerial Council noted that: "It is a great honor to witness the establishment of the Africa Energy Bank. This moment marks a significant milestone in our continent's journey towards energy independence and sustainable development. By harnessing our collective resources and expertise, we are paving the way for a brighter, more prosperous future for all Africans. The collaboration between Afreximbank and APPO is a testament to our unwavering commitment to powering Africa's growth and ensuring energy security for generations to come. I am confident that this newborn Institution shall grow to serve the cause of Africa and Its people. I commend the negotiating team and on behalf of the APPO Ministerial Council, I congratulate the team." Commenting on the event, Prof. Benedict Oramah, noted: "Today marks a historic day for our continent. We are honored to have collaborated with APPO towards the establishment of the Africa Energy Bank. These are challenging times when we must strive to find the right balance between the imperatives of mitigating climate change and the urgency of averting social upheavals as a result of increasingly difficult economic and financial conditions in Africa.



For us at Afreximbank, we are enormously proud to be co-investing in this new vehicle and for taking the lead role in advising on the management and implementation process with the operational launch set to commence in July.” Prof. Oramah added: “This has truly been a joint effort and we are immensely grateful to the members and leadership of APPO for their collaboration with Afreximbank as we look forward to continuing this endeavour to address the urgent needs of a continent and its people.”

ENDING DEPENDENCE ON EXTRA-AFRICAN FUNDING

Dr. Omar Farouk Ibrahim noted that the

AEB is Africa’s response to the imminent funding challenge that the global paradigm shift from fossil fuels to renewable energies - euphemistically called the Energy Transition - poses to the oil and gas industry in Africa: “For too long Africa’s oil and gas industry has been dependent on extra-African funding. We came to take foreign financing of our oil and gas projects for granted, until the advent of energy transition made us realize that those on whom we have depended for many decades have decided to abandon us.” The Secretary General argued that Africa cannot afford to abandon oil and gas in a hurry when it has the largest proportion of its population living without access to energy.



Exchange of initials between Prof. Benedict Oramah (Afreximbank) and Dr. Omar Farouk Ibrahim (APPO)



Group photo after the signing of the founding documents of the African Energy Bank

Dr. Farouk commended Professor Oramah for his exemplary leadership and commitment to the cause of the African continent. He also noted that the idea of the AEB was conceived and incubated in Cairo when H.E. Eng El Molla hosted the two Institutions in December 2020.

US\$5 BILLION IN CAPITAL

The AEB's primary objective is to fill the imminent void that the withdrawal of funding for oil and gas projects in Africa by the traditional financiers could cause to the industry. With over 125 billion barrels of proven crude oil reserves and over 600 trillion cubic feet of proven gas reserves, and more findings being made; it does not make sense for Africa to abandon

these energies when it has the largest proportion of world's population living without access to modern energy. While the AEB's main focus shall be funding oil and gas projects, it shall not close its doors to renewable energy projects. AEB shall strive to harness all forms of energy to ensure that Africa's energy poverty is eradicated. Although started by Africa, shareholding is open to all Investors who share the mission and vision of the Bank. The AEB has been structured as an independent and supranational pan-African energy development bank with an initial USD 5 Billion capital. With the signing of the Establishment Documents by the two founding institutions, all that remains is to have at least two Member Countries sign and ratify the Establishment Documents for the Bank to take off.

Three questions to...

Zakaria DOSSO, Managing Director AEICORP



APPO MAGAZINE : *Why was it time for Africa to set up a Bank dedicated to energy ?*

Zacharia Dosso : It is a well-known fact that a large proportion of African populations faces energy poverty, which is totally at odds with the enormous energy resources that the continent has. The sunshine is pronounced (on average more than 320 days per year), wind resource is available mainly in the eastern and mountainous regions of southern Africa as well as in a good part of North Africa, some rivers have enormous potentials that can meet the needs of the whole continent, countries like Niger have huge reserves of uranium for nuclear energy, and many countries have gas and oil and discoveries are continuing. Unfortunately, in order to be able to exploit these energy resources, significant financial resources are needed to meet our growing needs due to population growth. Those who produce our fossil fuels, for example, export them

in their raw state to meet their needs. Thus, the local African market is being left behind for the benefit of the people of those who have the financial might to exploit our resources. In addition to this fact, in this context of energy transition, financing for fossil fuels is beginning to become scarce while a good number of our states have their economies based on revenues from the exploitation of hydrocarbons. This financial dependence is in itself a real threat to these economies and an obstacle to improving access to modern energy sources for our populations. It was therefore necessary for our leaders to put in place a system that could fill this gap and, above all, to take control of this highly strategic energy sector into their own hands. In January 2019, APPO reformed its «APPA Fund for Technical Cooperation» into the Africa Energy Investment Corporation (AEICorp) with an authorized capital of \$1 billion to be able to provide the continent with a multilateral energy development finance institution. Subsequently, in May 2022, APPO decided to partner with Afreximbank to establish the Energy Bank (AEB). Africa Energy Bank is a much more ambitious project as we are expecting to mobilize an initial capital of \$5 billion, which can grow very quickly given the enormous needs of the sector. So to sum up, the Bank will finance the exploitation of the continent's energy resources to prioritise the internal market and curb the threats posed by the Energy Transition to our economies. It will enable Africa to follow its own agenda in terms of Energy Transition.

A.M. : *Who can benefit from the Bank's services?*

Z.D. : Since its Establishment Agreement stipulates that its objective is to facilitate, promote and finance the development of the oil, gas and energy sectors of the signatory States, the primary beneficiaries of the Bank's services will of course be the States that have ratified its statutory documents. Also, any actor operating in the above-mentioned sectors, i.e. national oil and gas companies operating in the hydrocarbons and energy sectors, and any entity, both private and public, having any impact on the development of these sectors in the Bank's Member States. The Bank will be a development bank, i.e. it will mainly finance or assist economic development projects in the energy sector.

A.M. : What are the next steps in the process for the effective launch of the Bank's activities?

Z.D. : As the founding documents having been signed by the two founding institutions since June 3, we will avail them to Member Countries for signature and ratification. It is only after ratification that a State becomes a full Member of the Bank. At the same time, the process of the selection of the host country is ongoing. A Ministerial Committee comprising three APPO Member Countries (Angola, Libya and Senegal), Venezuela and Afreximbank was set up. The mission of this Committee is to assess applications received from the six countries (Algeria, Benin, Côte d'Ivoire, Ghana, Nigeria and South Africa) having express interest to host the Bank, and make recommen-

dation to an Extraordinary Session of the APPO Ministerial Council for the final decision. Another action that is very critical to the Bank's operationalization is the mobilization of funds for its seed capital. APPO Member Countries will be the main contributors alongside Afreximbank for these seed funds. The APPO Ministerial Council has allocated to each Member Country the minimum amount of \$83.33 million as a share in the Bank's capitalization and we are working on the recovery of these sums which we hope the Countries will disburse gradually. Some have already begun, such as Nigeria, Angola and Ghana. The timeline of activities also includes the recruitment of key staff who will work with consultants for the development, procurement and implementation of all of the Bank's operational tools.

Africa's energy landscape with the birth of AEB

AT A TIME WHEN THE WORLD IS BEING HERDED INTO EMBRACING THE ENERGY TRANSITION, AFRICA FACES A SIGNIFICANT CHALLENGE, AS MOST PROPONENTS OF THIS TRANSITION ARE THOSE WHO HAVE SO FAR FINANCED THE OIL AND GAS INDUSTRY ON THE CONTINENT. THEIR FINANCIAL SUPPORT IS EXPECTED TO DECREASE AT THIS CRUCIAL STAGE OF THE SOCIO-ECONOMIC TAKE-OFF OF THE AFRICAN CONTINENT. THE AEB, IN ADDITION TO OTHER ALTERNATIVE FUNDING CHANNELS, WILL PLAY A LEADING ROLE IN PROVIDING ALTERNATIVE SOURCES OF FUNDING FOR THE OIL AND GAS INDUSTRY IN AFRICA

The Africa Energy Bank is set to play a leading role in financing Africa's oil and gas industry. With its status as a supranational, independent, pan-African Bank, AEB is open to APPO member countries and all potential APPO members sharing its unique mandate of financing the oil and gas industry in Africa. This banking structure will therefore serve as a new and innovative channel for the financing of the oil and gas industry in Africa and

will also play a leading role in reducing the industry's increased dependence on Western sources of financing, which is expected to decrease as a result of the aggressive pursuit of Energy Transition. The creation of the AEB is expected to significantly reduce the dependence of African countries on Western sources of financing, which are becoming less accessible in the context of the Energy Transition. AEB, like other financial institutions, is uniquely positioned to lead the financing of oil and gas projects and operations to ensure the sustainable development of this vital sector of Africa's resource-rich economies. Banks in resource-rich economies are better capitalized, more liquid, and more profitable. From this perspective, and with its mandate to ensure a long-term financing mechanism for the development of the oil and gas industry in Africa, the Africa Energy Bank will breathe a new life into the industry by providing the adequate financial resources needed to scale up significant investments in critical and transformational oil and gas programs and projects on the continent.

FOCUS ON AFREXIMBANK

Major partner of APPO in the creation of AEB



Headquarters of Afreximbank
Cairo, Egypt

At Afreximbank, our shared purpose is “to stimulate a consistent expansion and diversification of African trade so as to rapidly increase Africa’s share of global trade; and in doing so, to operate as a first class, profit-oriented, socially responsible financial institution and a center of excellence in African trade matters” and our shared vision is to consolidate the Bank’s position as “The Trade Finance Bank For Africa”.

Achieving our vision is dependent on our ability to successfully execute effectively our strategy around four strategic pillars, which are “Promote Intra-African Trade,” “Facilitate Indus-

trialization and Export Development,” “Strengthen Trade Finance Leadership” and “Improve Financial Performance and Soundness”. Our success will be defined by the satisfaction of our stakeholders through increased trade finance and improved facilitation of Intra-African trade and value-added exports and improvement in our financial performance, which itself positions us better to achieve our developmental objectives. Our financial performance is enhanced through strengthened financial soundness and improved business development activities, underpinned by sound risk management practices and adequate capitalization.

Through improvements in business development, we are able to leverage diverse channels to provide solutions to our clients and other stakeholders, while improvements in our internal capacities in terms of people, systems and organizational culture are the bedrocks that uphold the increased efficiency of our internal processes. As a self-governing institution, we emphasize strong governance structures as key components of enterprise risk management and promote an organizational culture based on our core values of Uncompromising Integrity, Teamwork, Trust and Respect for the Individual, Innovation, Excellence & Flexibility, a Passion for Learning and Drive, Professionalism and Responsiveness, a Com-

mitment to Africa and Supporting African Emancipation and Empowerment.

OUR VISION

To be the Trade Finance Bank for Africa.

MISSION STATEMENT

To stimulate a consistent expansion, diversification and development of African trade, while operating as a first class, profit-oriented, socially responsible financial institution and a center of excellence in African trade matters.

PROF. BENEDICT O. ORAMAH
CEO AND CHAIRMAN OF THE BOARD



Prof. Benedict Oramah holds a PhD in Agricultural Economics obtained in 1991 and has been decorated as a Professor of International Trade and Finance by Adeleke University, one of Nigeria's foremost private universities in 2018. Prof. Oramah worked as the Assistant Manager, Research, for the Nigerian Export-Import Bank from 1992 to 1994 before joining the African Export-Import Bank as Chief Analyst in 1994, rising to the position of Senior Director, Planning and Business Development Department, in 2007. He was appointed to the position of Executive Vice President of the Bank in October 2008, a position he held until his appointment as President in June 2015 during the 22nd Annual General meeting in Lusaka, Zambia and he was inaugurated in September 2015.

Prof. Oramah has written over 30 articles on a range of African economic and trade related matters, many of which have been published in leading international journals.



H.E. Ndolenodji Alixe Naimbaye Minister of Oil, Mines and Geology of Chad

The Amazon in a Man's World

SINCE OIL AND GAS BECAME THE DOMINANT FORM OF ENERGY GLOBALLY IN THE LAST ONE CENTURY AND A HALF OR SO, MEN HAVE LARGELY CONTROLLED THE INDUSTRY. FOR WHATEVER REASON, THE INDUSTRY CAME TO BE SEEN AS A MALE DOMINATED INDUSTRY. BUT THIS PERCEPTION IS CHANGING ACROSS THE WORLD, INCLUDING IN OUR CONTINENT OF AFRICA. THE EMERGENCE OF H.E. NDOLENODJI ALIXE NAIMBAYE AS CHAD'S MINISTER OF HYDRO-CARBONS AND THE ONLY FEMALE MINISTER IN THE 18 MEMBER APPO MINISTERIAL COUNCIL IS TESTIMONY TO THIS CHANGING TIMES.

PORTRAIT

From her debut in public life, Her Excellency Ndolenodji Alixe Naimbaye has distinguished herself as an influential and determined figure in the Chadian government. With an impressive track record, she has held several key ministerial positions, bringing her expertise and commitment to different strategic areas of Chad's development. The political career of Her Excellency Ndolenodji Alixe Naimbaye began on May 7, 2018 with her entry into the first government of the 4th Republic of Chad as Secretary of State for Foreign Affairs, African Integration and International Cooperation, where she quickly got to master the codes and requirements of a skillful diplomacy and an ambitious vision to strengthen Chad's relations with its international partners, while promoting regional integration in Africa. Subsequently, she was appointed to the position of two merged departments: the Ministry of Communication, Government Spokesperson and the Ministry of Posts, and NTIC on June 18, 2018, where she was at the forefront of the country's digital transformation, working to structure the players and operators of this market, reduce the digital divide throughout Chad and fully integrated this sector into the dynamics of an emer-

ging economy. Her visionary leadership helped to drive the necessary modernization of communications infrastructure and promoted digital inclusion, opening new opportunities for Chad's economic and social development.

WORKING TO IMPROVE LIVING CONDITIONS IN URBAN AND RURAL AREAS

The passage of Her Excellency Ndolenodji Alixe Naimbaye as Secretary of State for Finance and Budget from July 14, 2020 to July 9, 2022, was particularly marked by an evolution of the partnership with FAGACE in order to support the development of SMEs and VSEs, a direct and effective collaboration with her colleague in order to contribute to ensuring responsible management of public finances and promoting transparency and good governance. She also served as Minister of Land Affairs, Housing Development and Urban Planning in 2022 where she worked to create a regulatory framework conducive to sustainable and equitable urban development, while ensuring the protection of citizens' land rights and the improvement of living conditions in urban and rural areas.

A CRITICAL ROLE IN CHAD'S HYDROCARBON INDUSTRY

From November 2023 to the present, as Minister of Hydrocarbons, Mrs. Ndolenodji Alixe Naimbaye plays a crucial role in the management and promotion of Chad's energy resources. Her leadership in this strategic area is helping to stimulate the exploration and, above all, the responsible exploitation of the country's oil and gas resources, while ensuring that these resources benefit the entire Chadian population and contribute to the sustainable development of the country. Throughout her career, Mrs. Ndolenodji Alixe Naimbaye has demonstrated an unwavering commitment to public service, good governance and the socio-economic development of Chad. Her dynamic leadership, strategic vision and dedication to the public interest make her a key figure in the country's political and administrative scene, inspiring present and future generations to pursue the path of progress and sustainable development.

AN EXEMPLARY POLITICAL CAREER

Mrs. Ndolenodji Alixe Naimbaye is much more than

just a government figure in Chad. In addition to her remarkable career in government, she also plays an important role on the political scene, as she is President of the «Action for the Republic, Democracy and Development» (ARD) party, created by her late father Mbailaou Naimbaye Lossimian, who was succeeded by another figure before she took the reins in 2020. Through her social commitment – honorary president of Association des Ressortissants du Canton de Tilo (ARCT) – and her political commitment, she passionately defends the cause of rural development and consequently supports women's and young people's initiatives. It is this strong commitment that has led her to be co-opted for on the Advisory Board of the Sahel Women Investment Partners Fund. Her pragmatic leadership, her vision of a harmonious and inclusive development of a country as richly endowed as Chad, which she willingly shares to explain the conception of federalism, can prove to be a catalyst for change and progress, mobilizing citizens around important causes and reforms necessary for Chad's advancement.



H.E. MOHAMED ARKAB

Minister of Energy and Mines of Algeria

The imprint of a visionary technocrat

HIS EXCELLENCY MOHAMED ARKAB TOOK OFFICE ON FEBRUARY 21, 2021 AS MINISTER OF ENERGY AND MINES OF ALGERIA. HIS APPOINTMENT BY PRESIDENT ABDELMADJID TEBBOUNE CROWNS THE EXCEPTIONAL CAREER OF A SEASONED PROFESSIONAL WHO, AFTER HAVING HELD THE MOST PRESTIGIOUS POSITIONS IN HIS COUNTRY'S OIL AND GAS INDUSTRY, WAS SUCCESSIVELY PROMOTED TO MINISTER OF ENERGY AND THEN MINISTER OF MINES, AND FINALLY MINISTER OF ENERGY AND MINES.

PORTRAIT



Hussein-Dey is a commune in the wilaya of Algiers, located about 5 km east of the city center, in the heart of the Bay of Algiers. Minister Mohamed ARKAB was born there, four years after the independence of the People's Democratic Republic of Algeria. After successful primary, secondary and university studies, he became a state engineer in Mechanics, with an option in Energy Science. He also holds a master's degree in business administration, MBA in business management. He entered working life, joining the national electricity and gas company (Sonelgaz)

in September 1990, through his industrial assembly company ETTERKIB. Within this structure, he climbed the ladder, successively occupying several positions of responsibility. Until March 1992, he was responsible for mechanical works. He was then appointed Site Manager of power plants, a position he held for 5 years. In February 1997, he was promoted to Site Director, a position he assumed until October 2003.

LINCHPIN OF MAJOR INDUSTRIAL PROJECTS

Throughout his career, His Excellency Mohamed ARKAB has had to lead numerous projects for the construction of energy structures, whether they are power plants, substations, gas and oil processing units, or industrial projects of national scope. In November 2003, he was appointed Construction Manager at ETTERKIB, responsible for the implementation of all power plant and industrial projects. He held this position until June 2006, when he was appointed Chairman and Chief Executive Officer of this company. In September 2010, he took up the position of Chairman and Chief Executive Officer of the Compagnie de l'Engineering de l'Électricité et du Gaz (CEEG), a subsidiary of the Sonelgaz Group. In this capacity, he was then responsible for carrying out the entire development program of the Sonelgaz Group's business subsidiaries.

A PRESTIGIOUS RECORD

H.E. Mohamed ARKAB has, to his credit, results that command admiration. Among other things, he led the 4000 MW and 8000 MW programs and the 2000 MW emergency program for power plants as well as the five-year public gas distribution programs, and the works of the national gas transmission network.

He is also responsible for the implementation of programmes for the development of the national electricity transmission network (lines and substations), as well as the launch of the national renewable energy programme, with the construction of the first high-efficiency photovoltaic power plant and the first wind power plant. Also, he has actively worked on the preparation for the launch of the new national renewable energy program with a capacity of 4050 MW in photovoltaic power plants. M. Arkab is reputed to have revived the Algerian mining sector by increasing mining production through the launch of Integrated Phosphate Project (PPI) in the East of Algeria as well as the project to exploit mega-iron deposits of Gara Djebilet in the South West and Oued-Amizour (Zinc lead) in the center of Algeria. He is also responsible of diversifying the natural energy mix and target energy production at over 15,000 MGW by 2030.

FROM SONELGAZ TO MINISTERIAL CABINETS

In total, since his appointment as head of the CEEG,

there has been the commissioning of more than 8032 MW of additional national electricity production capacity, 9,200 km of national gas transmission network (construction of more than 700 public gas distributions with pipelines between 8” and 28”), 180 electrical substations with a transformation capacity of more than 20,448 MVA and 6700 km of national gas transmission network. transmission of electricity on 60, 220 and 400 kV lines. Installed on Wednesday, August 30, 2017 as President of Sonelgaz, H.E. Arkab held this position until his appointment as Minister of Energy from 2019 to 2020, then Minister of Mines until February 21, 2021. He has been Minister of Energy and Mines since that date and until today. The APPO, for its part, is counting on the active contribution of Mr. Mohamed ARKAB to carry the aspirations and the place that belongs to African oil and natural gas producers, with a view to developing the oil and gas industry, reducing the carbon footprint and ensuring access to available and affordable energy.



The delegation led by H.E. Minister Arkab, accompanied by his Congolese counterpart H.E. Bruno Jean Richard Itoua and welcomed by the DSS/APPO Mrs. P. A. Ikoko at the APPO Secretariat

APPO Secretariat was honored on 21st May with a visit by H.E. Mohamed Arkab, Minister of Energy and Mines of Algeria. Minister Arkab who is on country visit to the Republic of Congo was accompanied by his esteemed host, the Minister of Hydrocarbons of the Republic of Congo, HE Bruno Jean Richard Itoua and a delegation from Algeria which included the CEOs of Algerian Na-

tional Oil Corporation, SONATRACH Mr. Rachid Hachichi, and Sonelgaz M. Mourad Adjal as well as the APPO Executive Board Member for Algeria Mr. Amine Remini.

The Ministerial delegation was received by an APPO Secretariat Team, led by Director Support Services, Mrs Philomena A. Ikoko who represented the Secretary General who is currently participating in the APPO Roundtable on gas flaring, in Accra, Ghana. Minister Arkab and his team were briefed on the progress of work on the completion of the APPO Secretariat as well as an update on the implementation of Ministerial Resolutions on the establishment of the African Energy Bank (AEB). The Ministers were assured of the Secretariat’s continuous committed to driving the Organization’s progress and innovation in the energy sector across Africa. Minister Arkab expressed delight with the progress that APPO has made since the reform from APPO, urging the Secretariat not to relent in the face of challenges.



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H.E Ndolonodji Alixe Naïmbaye
Minister of Mines, Petroleum and Geology



Tchad

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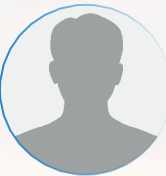
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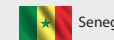
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APPO and Venezuela *¡One Flag!*

ECHOES FROM MEMBER COUNTRIES

TURNING OUR SIGHTS TOWARDS MOTHER AFRICA CONSTITUTES A HISTORIC DETERMINATION OF THE FOREIGN POLICY OF THE BOLIVARIAN REPUBLIC OF VENEZUELA, BASED ON THE RELEVANCE OF ADVANCING INTO A NEW MULTIPOLAR WORLD ORDER IN WHICH THE INTERACTION IN TERMS OF EQUALITY BETWEEN DIVERSE POLES OF POWER CAN PROPITIATE A WORLD OF POLITICAL EQUILIBRIUM, SOCIAL JUSTICE AND SHARED FUTURE.

The geopolitical and geostrategic importance, as well as the cultural richness of the African continent was conscientiously estimated by President Hugo Chávez, whose leadership of the Bolivarian State in relation to the historical objectives and ancestral struggles of the Venezuelan and Latin American people, connected with the historical efforts of Africa, framed in a perspective of South-South cooperation and now linked with the projection of the so-called Global South. The continuity of Venezuela's foreign policy advanced by President Nicolás Maduro Moros reaffirms the strategy of South-South cooperation with the African continent and honors the vocation of the Venezuelan and Latin American people to exalt the ancestral heritage of brotherhood and friendship between the peoples of Africa and our Latin America and the Caribbean.



The cooperation relations built between Venezuela and Africa stand out: the incorporation of Venezuela as an observer member of the African Union (AU) in 2005; they are united by the defense of strategic interests of the peoples and governments of their respective countries and continents. They are also united by the coordination of joint policies in multilateral organizations such as the Organization of Petroleum Exporting Countries (OPEC) and the Gas Exporting Countries Forum (GECF). A contemporary expression of the relations between Africa and Venezuela is also the unprecedented Membership of the Bolivarian Republic of Venezuela to the African Petroleum Producers' Organization (APPO) as Honorary Member, unanimously approved at the forty-first ordinary session of the Council of Ministers chaired by the Minister of Energy and Mines of the People's Democratic Republic of Algeria, Mohamed Arkab, held on December 14, 2021, granting the country the status of the first non-African Member. This decision resulted from reflections and exchanges of opinions between the Secretary General of the APPO, Dr. Omar Ibrahim Farouk and the Head of the Venezuelan Diplomatic Mission to the Republic of Congo, Ambassador Aníbal Márquez Muñoz, held in the city of Brazzaville, where the headquarters of the APPO is located.



His Excellency Mr. Pedro Rafael TELLECHEA, People's Minister of Petroleum, with the SG of the APPO



Workers from PDVSA, Venezuela's SNH

AFRICAN UNION AND VENEZUELA

It is worth highlighting the so-called «Agenda 2063, which has become Africa's master plan to transform the continent into the global power of the future. It is the continent's strategic framework to achieve its goal of inclusive and sustainable development and is a concrete manifestation of the Pan-African drive towards unity, self-determination, freedom, progress and collective prosperity pursued under Pan-Africanism and the African Renaissance. Since priority must be given to inclusive social and economic development, continental and regional integration, democratic governance and peace and security, among other issues aimed at repositioning Africa to become a dominant player on the global stage, Venezuela with its vast experience and historical trajectory in the field of hydrocarbons is inserted in a determined manner in the promotion of cooperation through investments and also the future commercialization of products in a pivotal continent with the projection of a global power.

WORKING VISION

Venezuela recognizes APPO as a leading and refe-

rence institution in the field of hydrocarbons in Africa, with the vision of cooperation in the field of hydrocarbons among its member countries and with other global institutions to foster collaboration and fruitful partnerships, while using oil as a catalyst for energy security, sustainable development, and economic diversification in Africa. The current strategic process of establishing the Africa Energy Bank (AEB) is in line with this orientation. In this line of action, the Venezuelan Minister of People's Power for Petroleum, Pedro Rafael Tellechea, in compliance with the lines of work of President Nicolás Maduro Moros, has met with several energy and petroleum ministers of the African continent, with the purpose of establishing cooperation mechanisms, making available Venezuela's experience in the oil industry, as well as its oil and gas reserves to complement the coverage of the energy demand required by the peoples of Africa and thus guarantee energy security and economic and social development. Venezuela welcomes his membership to APPO and reiterate the willingness of his people, government and oil and gas institutions to actively contribute to the achievement of the common objectives set forth.

Our North is the South

IN FACT, THE ANCESTRAL COMMON HISTORY OF OUR PEOPLES WAS THE MAIN INSPIRING ENERGY OF OUR DIPLOMATIC AND CULTURAL ACTIONS ROUTED AT PROMOTING THE INCORPORATION OF VENEZUELA INTO THE STRATEGIC AFRICAN ORGANIZATION OF PETROLEUM PRODUCING COUNTRIES (APPO).

A REFLECTION BY AMBASSADOR ANÍBAL JOSÉ MÁRQUEZ MUÑOZ



Ambassador Aníbal José Márquez Muñoz

The history of the people of Venezuela has always testified the deep relationship of brotherhood that links him with the African people. Transcendentals stories confirm the affinity between Mother Africa and our country, especially since the time when thousands of African families, torn away from their territory, rebelled against enslavement to contribute in our lands to the construction of the New World. The maternal dedication of the Afro-descendant heroines

Matea and Hipólita Bolívar stands out, who dedicated their lives to the upbringing and forging of the egalitarian genius of the young native of Caracas, Simón Bolívar, who would later be known as The Liberator of South America. Also notable was the crucial participation of descendants of Mother Africa in the continental, anti-colonial and Independence struggle, against European colonialism led by Venezuela and that, honors the common history of the Venezuelan and African people.

Our contemporary era also exhibits extraordinary bonds between Venezuela and Africa. The defense of the higher interests of the people and governments of our countries and continents unites us. Precisely, in direct harmony with said historical context -in synergy with the foreign policy guidelines of the Presidency and Chancellery of our country in terms of prioritizing oil links with Mother Africa and, in response to our conviction about the relevance of identifying common dynamics to promote bilateral, bi-regional and multilateral bonds of political, economic, cultural, scientific and educational order- was that we assumed the timely -!and well received!- initiative of proposing to the General Secretariat of the APPO, headed by Dr. Omar Farouk Ibrahim, the possibility

of considering the incorporation of Venezuela as an Observer Member.

Today, the unprecedented Bicontinental geopolitical space of South-South Cooperation, harmoniously links the strategic interests of the APPO member nations and Venezuela -coffering us the status of the only Non-African Member Country- privileges the rational use of energy resources for the benefit of its respective peoples and States, rebuking the harmful extractive exploitation and the biased refusal of the West to transfer knowledge and technologies to the communities that own the oil and gas resource, to detriment of the right to effective and ecological enjoyment of the same by present and future generations.



Their Excellencies the SG of APPO Dr Omar Farouk Ibrahim and Ambassador Aníbal José Márquez Muñoz

The APPO Guide

for promoting Local Content development in Member Countries' Oil and Gas Industry

IN 2019, THE APPO SECRETARIAT CONDUCTED A STUDY WHICH LED TO THE DEVELOPMENT A GUIDE FOR PROMOTING LOCAL CONTENT IN THE OIL AND GAS INDUSTRY IN ITS MEMBER COUNTRIES. THIS GUIDE WAS REVISED IN 2023 IN THE LIGHT OF THE GLOBAL PARADIGM SHIFT AWAY FROM FOSSIL FUELS TO RENEWABLE ENERGIES, EUPHEMISTICALLY CALLED ENERGY TRANSITION, AND THE CHALLENGES IT POSES TO THE OIL AND GAS INDUSTRY IN AFRICA. THE REVISED STUDY CAME UP WITH PRACTICAL RECOMMENDATIONS ON ADDRESSING THESE CHALLENGES, THROUGH A LONG-TERM STRATEGY DOCUMENT.

African oil and gas industry has remained for decades under the control and management of international players along the industry value chain. It took several decades after they had started oil and gas production before many countries started establishing training institutes to train indigenous people in the oil and gas professions. Apart from a few countries, the curricula of these training institutes were not comprehensive enough nor targeted to achieve utmost success in the industry. The in-depth reflections on how Africans should carry out by themselves the activities of the industry along the value chain and even the management of the industry, emerged only around the year 2000. Many countries started by integrating into their regulations clauses on training and prioritizing the local manpower in oil and gas activities. Thereafter, the sharing of experience, the transfer of technology and the involvement of local firms to provide services within the framework of the activities in the industry, the manufacturing of goods and provision of services locally to serve the industry, began taking place in the sector. Nowadays, some countries have gone even further in the process of taking ownership of the industry by setting up mechanisms for promoting, collaborating, partnering, and financing to make the local workforce, services, goods and businesses competitive to supply the industry with the required goods and services.

HOW TO DEFINE LOCAL CONTENT?

There is no standard and commonly accepted definition for Local Content, but when the following four key elements are put together, we can already find the essence of Local Content:

1. Purchases from national suppliers of goods and services: location of company registration, the extent of value addition in country, or equity ownership.
2. Employment of local staff: The employment of staff considered local, which in turn could be defined as nationals or those from the immediate surroundings of the extractive operation.
3. Support local economic development through local enterprise development or social investment.
4. Effects on induced employment, suppliers, and customers

Local Content should be seen in a broader perspective, including financing, promoting local industry, the development of indigenous manpower and local research and development.

LOCAL CONTENT MANAGEMENT IN APPO MEMBER COUNTRIES

To develop Local Content across the entire value chain of its O&G industry, a Country is called upon to establish a Local Content Framework or Regulation, i.e. its Local Content Policy. Indeed, APPO Member Countries have approached the issue of Local Content in different ways and are at different levels of Local Content development. Some have addressed Local Content by integrating the concept into constitutional law and national laws. Other countries have included Local Content provisions in the petroleum law and its implementing decrees. Furthermore, some countries have specifically developed a law dedicated to Local Content. Finally, in many other countries, Local Content is governed by presidential decrees and ministerial orders.

Regulation alone is not enough for ensuring development and advancement of Local Content in the relevant economy sectors. Given that the oil and gas industry involve several stakeholders along the value chain, namely the Government, National Oil Companies, International Oil Companies, Suppliers, Local Communities, Civil Society Organizations, Educational and Training Institutions, it is essential to set up a mechanism for monitoring and implementing Local Content strategies. In APPO Member Countries, the mechanisms and strategies put in place for promoting Local Content implementation are variously appreciated. Most of the countries are monitoring and implementing Local Content policy through the Ministry in charge of Hydrocarbons. Others manage Local Content through their NOCs. Moreover, other countries have gone further by establishing independent regulatory authorities, agencies, Committees, and Commissions to manage Local Content.

STEPS TO SET UP A SUCCESSFUL LOCAL CONTENT POLICY AND IMPLEMENTATION FRAMEWORK

When establishing a Local Content Framework/Regulation, APPO Member Countries may consider the following for an effective approach:

- * Establish a dedicated regulatory framework that mandates measurable and timed Local Content Requirements.
- * Create funding provisions to enable Local Content institutions implement their strategies and programmes.
- * Create a dedicated Local Content Management institution and empower it to enforce the regulations and fund the established programmes.
- * Upgrade the regulatory instruments to ensure that all requirements relevant to Local Content are covered.
- * Develop and implement measurement, monitoring, reporting, and sanctioning methodology to implement the regulatory framework.
- * Develop strategies to enhance the local supply of services and goods that meet the requirements of the industry in quality and quantity.
- * Support the upgrade of the existing SMIs/SMEs to meet relevant industry demands and help create new SMIs/SMEs to meet currently unavailable goods and services demanded by the industry.

- * Participate in the establishment of the industrial zones with adequate infrastructure and utilities to host the manufacturing of tools, equipment, spare parts, and materials that are in demand by the O&G industry.

- * Establish manufacturing and assembly lines in host countries in collaboration with the foreign goods manufacturers and suppliers, when goods cannot be manufactured or assembled by local suppliers, then train nationals in the foreign supplier factories within the contract duration.

- * Collaborate with local higher education institutions to ensure that enough numbers of engineers, graduates, and post-graduates are taught in the disciplines required by the O&G industry.

- * Support the establishment of research, development and innovation centres and conduct scientific and applied research to help develop and master advanced technologies and technical solutions that are needed to face the contemporary challenges of O&G industry.

- * African NOCs may take ownership of the Local Content enhancement cause and establish Local Content monitoring unit in their organizational structure, employ nationals, support employees training, local sourcing of good and services as well as establish and support affiliate production and service companies to master the industry at scale.

- * African countries need to give more attention to the Local Content cause in the established collaboration forums to ensure that views and lessons learned are exchanged and implemented.

- * When APPO Member Countries consider joining international treaties such as WTO, they need to carefully evaluate the benefits of Local Content Regulation as compared to the benefits of joining such treaties and when joining international treaties is paramount, the Local Content Regulations and mandates are to be set in a manner not to conflict with these treaties.

In conclusion, Local Content in O&G industry in APPO Member Countries has been managed variably while some mechanisms were more effective than others, it remains necessary for governments to benchmark their management of Local Content and apply the best approach in this context. The determining factor will always be the extent of the participation of the local goods and service suppliers and locals' employment and the timeline for achieving this.

Discovering a hydrocarbon profession

Drilling site geologist

BUSINESS FOCUS



THE OIL AND GAS INDUSTRY IS CHARACTERIZED BY A DIVERSITY OF OCCUPATIONS THAT INTERACT WITH EACH OTHER THROUGHOUT THE NATURAL RESOURCE EXPLORATION AND PRODUCTION CHAIN. THIS IS THE CASE WITH THE PROFESSION OF DRILLING GEOLOGIST, AN ESSENTIAL PLAYER IN THE PROCESS OF HYDROCARBON EXPLORATION AND PRODUCTION.

The role of the drill site geologist is to determine the petroleum potential of sedimentary basins. It then carries out regional or detailed studies, which may lead to the granting of an exploration permit. Once this initial choice has been made, the geologist will help identify the objects to be drilled. If the drilling results in a discovery, it will continue to be active during the evaluation phase of the discovery, aimed at verifying its size and economic interest, and may then be involved in the development and production phase (operations and reservoir geologist, etc.).

A STRONG INVOLVEMENT IN FIELD ACTIVITIES

The field of activity of the geological driller concerns the evaluation, delimitation, and de-

velopment of hydrocarbon discoveries, mainly from a geological point of view, but also from a geophysical point of view. The objective is to propose an assessment of the characteristics of the reservoirs, the size of the accumulations and the volumes of hydrocarbons they contain. The reservoir engineer can then propose one or more schemes for optimizing the development and production strategy of the identified resources, depending on the characteristics of the reservoirs and the economic constraints. The drilling geologist is also required to perform field summaries at different stages of project maturation, which will lead to operational decisions for the acquisition of new data, particularly seismic data. These will lead to the drilling of additional wells to reduce uncertainties.

THE MAIN TASKS OF THE RESERVOIR GEOLOGIST

The Site Geologist's responsibilities include the continuous integration of data and results from assessment, delineation, and development drilling, as well as any new seismic, to enable a better understanding of the reservoir, in preparation for operational decisions to be made in the context of the project, and the optimization of reservoir knowledge through dedicated interpretation. It is also responsible for quantifying uncertainties and risks. It reports and proposals at all stages of the project.

THE MAIN SKILLS TO BE ACQUIRED

The skills expected of the drilling geologist are quite broad and include sedimentary and structural geology, reservoir geology, knowledge of drilling measurement tools and evaluation of acquired data, mastery of interpretation and modeling software. The field of activity of the drilling geologist may overlap with that of the reservoir engineer, although the boundary between the two specialties is not always clearly defined. Reservoir engineers work at the intersection of exploration and production. They are responsible for interpreting and integrating reservoir data to estimate production potential

and technical means for optimizing hydrocarbon upgrading rates. They rely heavily on a range of static and dynamic reservoir modelling techniques, which will be used to design production platforms and reservoir lifetimes. The studies carried out by the geologist and the reservoir engineer contribute to the development and rational production of the reservoir under conditions that preserve the integrity of the reservoir.

TECHNICAL AND BEHAVIORAL SKILLS

Petroleum geologists work for oil companies, oilfield service companies, and research institutes. Companies in the oil sector typically seek a balance between university-educated geologists and those with professional training and certified specialist training. Geologists are top scientists. Their regional knowledge of sedimentary basins or specialized expertise goes hand in hand with a strong ability to work in multi-disciplinary, multicultural, and multi-generational teams, and later, to manage the same type of team. They must be open-minded, rigorous in their reasoning and respect for deadlines and budgets, but also be able to think outside the box and be creative. They must be able to synthesize large volumes of data in varying formats and quantities.



Lest we Forgot

How Hydrocarbons changed the world

IN THEIR QUEST TO SELL THE GLOBAL ENERGY TRANSITION AGENDA, TRANSITION ACTIVISTS HAVE EMPLOYED A STRATEGY OF DEMONIZATION OF OIL AND GAS, PAINTING A VERY NEGATIVE PICTURE OF THESE TWO SOURCES OF ENERGY. FOLLOWING THE OUTPOURINGS CLIMATE ACTIVISTS ON OIL AND GAS, ONE WOULD BE FORGIVEN TO THINK THAT

THERE NEVER WAS ANY MOLECULE MORE DANGEROUS TO HUMANKIND THAN OIL AND GAS. BUT HOW CORRECT ARE THESE ASSERTIONS? FOR ANY NEGATIVE ASSOCIATED WITH OIL AND GAS, THERE ARE SEVERAL POSITIVES AS OUR DAILY LIVES PROVE BELOW.



The contribution of oil and gas to modern civilization and modern living cannot be overemphasized. Let's do a little review of what can be found in a bedroom or office. Let's start with the walls. They are covered with colored paint. The manufacture of this paint and the dyes that tint it is done by the petrochemical industry, which uses oil as a raw material. Also, it is very common to find, in interiors, products made from plastic: garbage cans, toys, shoes, television, computers, etc. In fact, nowadays, plastic is found everywhere, whether in appliances, windows, cars, furniture, pens, and even in lingerie. Also, petroleum-based products are used in the production of PVC such as gutter pipes, electrical ducts, etc. They are used in the manufacture of car tires, inner tubes, etc. Other products of our daily lives, such as adhesives, ink, gla-

zing for planes and boats, spectacle lenses, washbasins and bathtubs for shower cubicles, are obtained from acrylates, products derived from petroleum. Applications extend to the manufacture of foams for mattresses and chair upholstery. Polycarbonates, which are petroleum polymers, are used in bulletproof vests, canisters, bottles, baby bottles, camera cases, and motorcycle helmets. Finally, oil is used to make road bitumen, detergents, nitrogen fertilizers, and many other everyday products.

BEYOND THE COMFORTS OF THE HOME AND THE OFFICE TO MEDICINES AND LIFE SAVING DEVICES

You are certainly familiar with aspirin or acetylsalicylic acid, the painkiller used by everyone: it is prepared from phenol, a component of petroleum.

It is also used to manufacture many medicines such as antibiotics, antiseptics, sedatives, antihistamines and disinfectants. More generally, the long chain of carbon atoms connected, each carrying several hydrogen atoms that form oil, can be rearranged using chemical reactions. Thus, it is possible to recreate just about any molecule that already exists – or not – in nature. This makes it possible to recreate substances initially identified in plants, and to make synthesized drugs out of

them. These treatments make it possible to obtain substances used in medicine and pharmacy, such as petroleum jelly, petroleum jelly oil, paraffin, alcohol, chloroform, aromatic hydrocarbons or their derivative compounds and nitrogen's from the superheating of oil. In addition, petrochemical products are widely consumed in the manufacture of medical equipment such as syringes, catheters, oxygen masks, elastic bandages, and some surgical tools.



AND TO FOOD AND NUTRITION

The exponential growth in today's global population requires exponential growth in food supplies. Failing which the world could face mass starvation and deaths. What many people do not recognize is that mass production of food can only be done with the aid of fertilizers, which are

petrochemical products. Various fertilizers are fit for various soil types and for various plants. Similarly, many animal medications are made from petrochemicals, thus making for larger breeds of animals and fishes and birds. So next time you hear transition activists demonizing oil and gas, remember the benefits you get daily from oil and gas.

How to reduce your carbon footprint ?

REDUCING YOUR CARBON FOOTPRINT IS CRUCIAL GIVEN THE INCREASING CONCERNS ABOUT CLIMATE CHANGE AND ITS IMMEDIATE AND POTENTIAL IMPACTS WORLDWIDE. FORTUNATELY, THERE IS POSSIBILITY FOR NATIONS TO MAKE SIGNIFICANT EFFORTS TO REDUCE CARBON FOOTPRINT.



Limiting global warming to 1.5°C by the end of the century is a goal shared by many countries. Over 190 countries signed the Paris Agreement in 2015, aiming to achieve this ambitious target. One step towards this goal is achieving carbon neutrality, or «net-zero emissions» (ZEN), which involves not emitting more CO₂ than can be absorbed. It's about striking a balance between CO₂ emissions from human activities and the removal of CO₂ from the atmosphere by managed natural environments, such as forests, agricultural soils, etc., and certain industrial processes like carbon capture and storage or reuse. To achieve net-zero emissions, it's necessary to significantly reduce CO₂ emissions and then offset any emissions that cannot be eliminated.

SOURCES OF CO₂ EMISSIONS

Each human being emits CO₂ directly through its own activities (manufacturing, transportation, storage, travel, energy consumption, etc.), as well as indirectly through purchases of materials and services (designed and produced upstream), and through the products and services it sells, which may consume resources during their use by the buyer (electricity, fuel, water, consumables, etc.). There are three types of greenhouse gas emissions: direct emissions (fossil fuel combustion in industry, chemical reactions), indirect emissions associated with electricity, cooling, and heating consumption (preservation, storage, artificial light, etc.), and other indirect emissions upstream and downstream of production (waste, business travel, commuting, etc.).

ASSESSMENT OF EMISSIONS

Measuring the carbon footprint of states is a complex matter. With tons of CO₂ accumulated over centuries, developed countries, led by the United States, bear significant historical responsibility. However, China is currently the world's largest emitter, closely followed by other rapidly developing countries like India and Russia. The global average of emissions is 4.4 tons per year per capita; however, to

keep the global temperature increase below two degrees compared to the average -



range of the pre-industrial era (mid-19th century), emissions would need to drop below two tons by 2050. A handful of countries, including the United States, Australia, and New Zealand, have a footprint at least three times higher than the average.

ACTIONS TO REDUCE CO₂ EMISSIONS

At the industrial level, companies can implement numerous measures tailored to their needs and

constraints. In Africa, transitioning to clean energy, such as using natural gas as a transitional energy source for electricity production and in industry and transportation, is encouraged. Similarly, investing in clean technologies for hydrocarbon extraction, such as carbon capture and storage, is recommended, as well as reducing methane leaks and optimizing water use in the oil and gas industry. Additionally, adopting renewable energy sources like solar and wind in low-density areas is crucial. As for promoting sustainable practices, traditional farming and construction methods should be favored to minimize carbon emissions. Adopting agroforestry can also improve soil fertility, water retention, and carbon sequestration. Lastly, using cooking fuels such as LPG or natural gas and improved stoves contributes to measures to reduce the carbon footprint.

PERSONAL EFFORTS

Every individual can contribute to collective efforts by reducing their carbon footprint through simple daily actions. For example, reducing shower time, using the dishwasher only when full, composting, and recycling are effective measures. Additionally, transportation methods have a significant ecological footprint, so individuals can carpool, avoid idling their vehicles unnecessarily, reduce air travel when possible, walk or bike when feasible, use public transportation, and limit commuting distances by living close to work. When making purchases, always opt for reusable products over disposable ones, choose bulk over packaged products, reduce purchases by favoring exchange and buying used items, opt for local products, and support companies making efforts to reduce their carbon footprint. Finally, speaking out is crucial. In Africa, where the effects of climate change are already significant, it's even more important to act quickly and effectively.

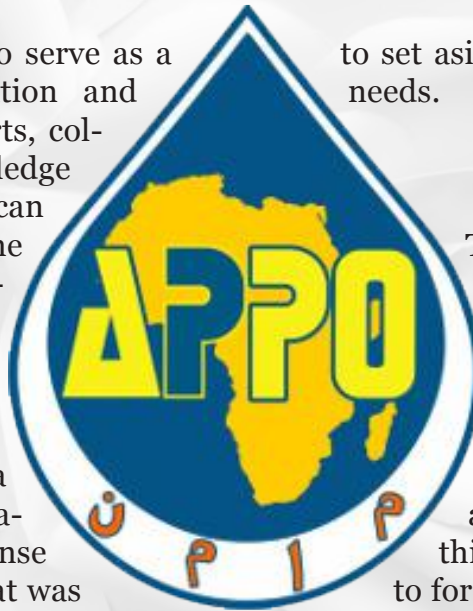
January 27, 1987

An important date in the life of APPO

DID YOU KNOW ?

JANUARY 27, 1987 IS AN HISTORICAL DATE FOR THE AFRICAN PETROLEUM PRODUCERS' ORGANIZATION (APPO), FORMERLY KNOWN AS THE AFRICAN PETROLEUM PRODUCERS' ASSOCIATION (APPA). IT IS THE DATE OF THE CREATION OF THIS INTERGOVERNMENTAL ENERGY ORGANIZATION IN LAGOS, FEDERAL REPUBLIC OF NIGERIA.

The APPO was set up to serve as a platform for cooperation and harmonization of efforts, collaboration, sharing of knowledge and expertise among African oil-producing countries. The idea to create this organization dates to the 1980s. At that time, informal meetings were held between the African OPEC member countries, Algeria, Gabon, Libya and Nigeria. These consultations were decided in response to an oil market situation that was confronting developing countries, particularly oil-importing African countries, with supply difficulties. These countries therefore decide



to set aside 4% of their production to meet these needs.

FROM IDEA TO REALITY

The first meeting of this group of four countries took place in Libreville, Gabon, in October 1984. Subsequently, consultations were initiated with other non-OPEC oil-producing African states to integrate them into the association. In June 1985, in Brioni, former Yugoslavia, another meeting was held. It was during this consultation that the leaders decided to formalize the melting pot. Subsequently, Libreville hosted the first formal meeting of the representatives of the founding countries to draft the statutes of the Association.



Général Ibrahim Babaginda, President of the Federal Republic of Nigeria, inaugurating the establishment of APPA in Lagos, Nigeria, on January 27, 1987

This summit took place on 21 and 22 April 1986. In January 1987, eight African oil-producing countries – Algeria, Angola, Benin, Cameroon, Congo, Gabon, Libya and Nigeria – met in Lagos, Nigeria, to formally create the African Petroleum Producers' Association: these were the founding countries. The Organization's headquarters are in Brazzaville, Republic of the Congo.

***AN ORGANIZATION THAT HAS
MATURED OVER TIME***

Today, the number of APPO Members Countries has increased from eight in 1987 to eighteen. These are Algeria, Angola, Benin, Cameroon, Chad, Congo, DR Congo, Côte d'Ivoire, Egypt, Ghana, Equatorial Guinea, Gabon, Libya, Namibia, Niger,

Nigeria, Senegal and South Africa. Between 2014 and 2019, the Association underwent a major reform requiring a critical review of its mission and vision, its organizational structure, and even a name change. Thus, from African Petroleum Producers' Association (APPA), it became the African Petroleum Producers' Organization (APPO). The reform was in response to the rapid pace of change in the global energy landscape. Today, the organization remains open to joining other like-minded African countries.

In 2021, it welcomed the Bolivarian Republic of Venezuela, a South American country, as Honorary Member. This historic membership makes Venezuela the first non-African country to join the APPO, proof, if proof were needed, of the Organization's openness to the world.



Festivities to commemorate the 37th anniversary of the APPO on January 27, 2024 in Brazzaville (Congo)



APPO TOWER



APPO MEMBER COUNTRIES

- | | | | | | |
|---------|---------------|----------|--------------------|---------|--------------|
| ALGERIA | CAMEROUN | DR CONGO | GHANA | NAMIBIE | SENEGAL |
| ANGOLA | CONGO | EGYPTE | GUINEE EQUATORIALE | NIGER | SOUTH AFRICA |
| BENIN | CÔTE D'IVOIRE | GABON | LIBYA | NIGERIA | TCHAD |