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“**Data
is the
New Oil**”

- Stephan Nilsson

**A.I.
IN
ENERGY**

FEATURE

Artificial Intelligence's
Revolutionary Effect
in the Oil and Gas
Sector

The Future of Energy:
AI, Machine Learning
& IoT at Home

Revolutionizing
Transportation through
Increased EV Adoption

Enhancing
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PUBLISHER'S NOTE

WELCOME TO THE AGE OF AI

Welcome to the latest edition of Business Tabloid!

We explore how two powerful forces, Artificial Intelligence (AI) and Energy have become a juncture of transformation.

Throughout this issue, we focus on the incredible strides made in integrating AI technologies into the energy sector thus pushing us ever closer to a more sustainable and efficient energy future.

Within these pages, you'll discover controversial topics on whether the move to Electric Vehicles (EVs) saves fuel & energy usage, the impact of AI and tech-based investments in Oil and Gas, what role robotics play in the Hydro energy sector, how IoTs (Internet of Things) play a vital role in shaping the global energy sector.

Take a look into the heart of industries directly linked to AI and energy by exploring the pivotal role played by robotics. A new era of efficiency & sustainability is driven using AI and robotics, starting from maintaining crucial energy infrastructure to advancing exploration in the oil and gas sector, robotics.

Smart grid technology, energy-efficient manufacturing, the role of AI, IoTs and the advent of robotics in monitoring and optimizing a comprehensive overview of the multifaceted impact that AI is having on the energy landscape.

As we read through the pages of this magazine, let us appreciate the visionaries, developers and innovators who are steering the transformative journey.

The AI revolution is no longer just a word used to attract headlines but is now the core of these people doubling down on their commitment to harnessing the power of AI for a greener, smarter, and more sustainable energy future to the boundless possibilities that emerge when human ingenuity meets cutting-edge technology.

Vinay Prakash,
Digital Executive Officer (DEO)

Business Tabloid

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FAB Teams Up with ENGIE to Improve Decarbonisation Solutions

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Moody's Launches GenAI Tool to Power Analytic Insights

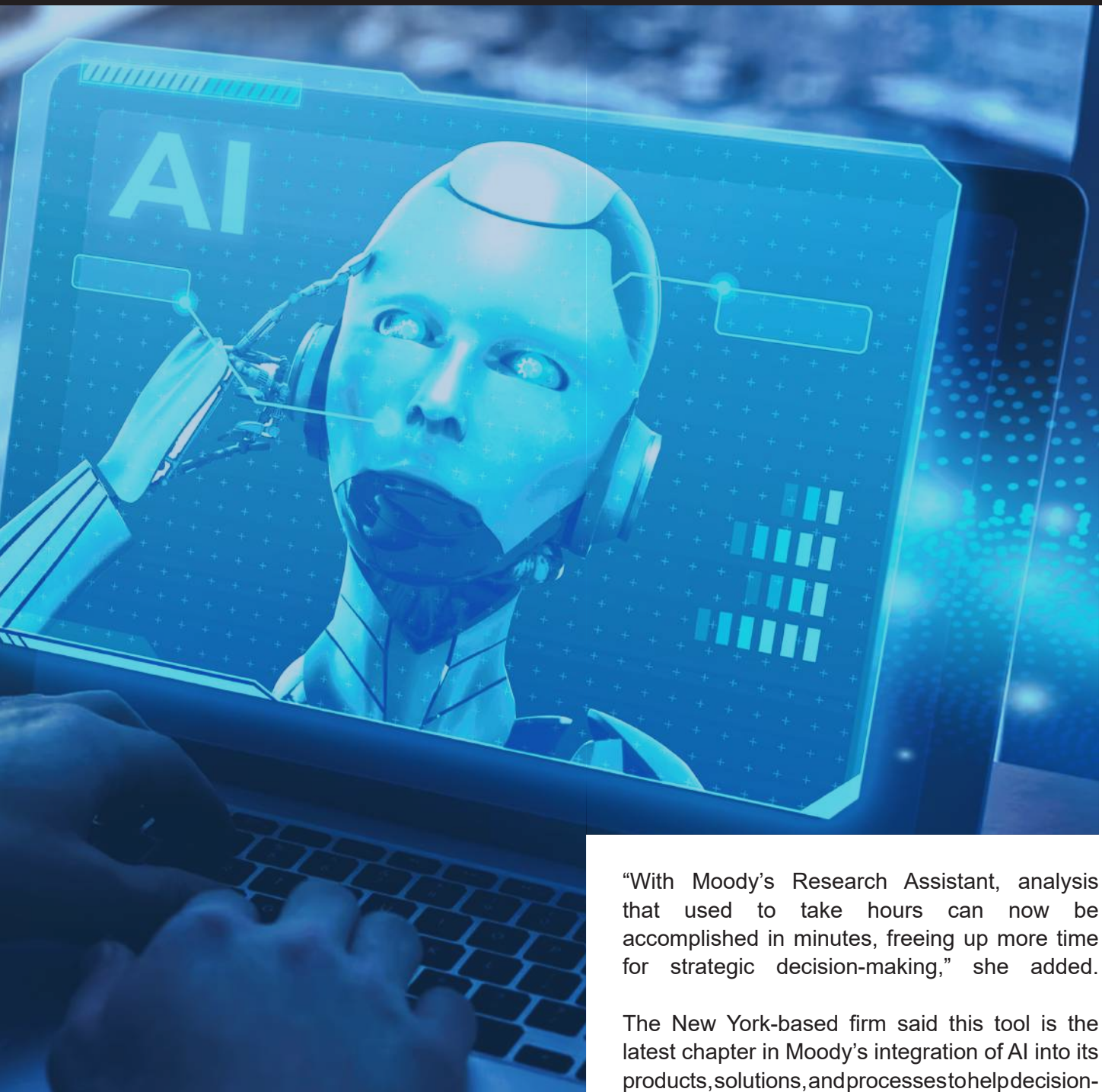
BY MATILDA DENSON

Economic analysis software provider Moody's Corp launched an analytical tool powered by generative artificial intelligence (GenAI) called Moody's Research Assistant, recently.

The company said using Moody's extensive proprietary content, including the updated large language models (LLMs), this newly launched tool will help customers generate and understand the width and depth of Moody's credit research, analytics, and data.

Most companies across the various business industries have started to shift towards AI as it cuts down expenses and improves efficiency in function.

The credit rating firm added, being the first GenAI-powered research tool that is available for financial market customers, Moody's Research Assistant will adapt vast amounts of information so users can assess lending or investment opportunities, monitor developments, compare entities, and also enhance analytical workflows rapidly and at scale.



Cristina Pieretti, general manager of digital insights for Moody's Analytics, stated

“ FOR FINANCIAL MARKET PARTICIPANTS, SUCCESSFULLY NAVIGATING TODAY'S COMPLEX RISK LANDSCAPE REQUIRES RESOURCE — INTENSIVE ANALYSIS OF A VAST ARRAY OF RESEARCH AND DATA ACROSS SEVERAL RISK DOMAINS. ”

“With Moody's Research Assistant, analysis that used to take hours can now be accomplished in minutes, freeing up more time for strategic decision-making,” she added.

The New York-based firm said this tool is the latest chapter in Moody's integration of AI into its products, solutions, and processes to help decision-makers decode risk and unlock opportunities.

Over a week ago, data analytics firm Fitch Solutions' subsidiary, GeoQuant, was named “Most Innovative Third-Party Technology Vendor—AI and Machine Learning” at the American Financial Technology Awards (AFTA).

Fitch said GeoQuant uses advances in political and computer science to create high-frequency, systematic country risk data and analytics, quantifying more than 40 political risks across 127 countries.

OPG COLLABORATES WITH WESTINGHOUSE TO VENTURE INTO COOPERATION

BY **SWATHI**

Nuclear power-generating firm Ontario Power Generation (OPG) and its peer Westinghouse Electric Co signed a memorandum of understanding (MOU), in Paris at the World Nuclear Exhibition.

This partnership aims to establish a framework for the deployment of nuclear technologies, said OPG. This includes an investigation of potential business prospects for Westinghouse's AP1000, AP300, and eVinci reactor technologies.

The newly built collaboration also examines other potential areas to venture into the new-build market. Including the study of licensing and regulation for the upcoming projects in Canada. In late November, the Canadian firm partnered with companies from Canada, the United States, and France to

strengthen nuclear fuel supply chain and attain self-sufficiency and to develop nuclear generators to decarbonize their economy.

“WESTINGHOUSE LOOKS FORWARD TO FURTHER DEVELOPING OUR LONG-STANDING RELATIONSHIP WITH OPG AND TO THE OPPORTUNITIES THAT OUR FULL SET OF ADVANCED REACTOR TECHNOLOGIES OFFERS FOR A VERY DIVERSE SET OF MARKET NEEDS,” SAID PATRICK FRAGMAN, CEO OF WESTINGHOUSE.”

Patrick Fragman
CEO of Westinghouse.

“The AP1000 reactor has achieved fleet status, providing exceptional availability and

economics,” said Fragman, adding, “For that reason, we based the AP300 SMR on this proven licensed technology.”

“Along with the eVinci microreactor for a myriad of applications in communities and industry, we are proud to explore these technologies with OPG for Canada,” said the CEO of Westinghouse.

Toronto-based OPG is one of the well-established power producers, also known as the generators of clean electricity, in North America. OPG also owns several additional facilities in Ontario and the United States.

“Along with building four SMRs at our Darlington New Nuclear site, we believe it is prudent to explore all nuclear technologies that could help build out the grid in a timely, cost-effective way that benefits Ontario ratepayers,” said Ken Hartwick, chief executive of OPG.

MASDAR JOINS FORCES WITH PLN TO DEVELOP FLOATING SOLAR PLANT IN INDONESIA



BY SWATHI

Renewable energy firm Masdar partnered with Perusahaan Listrik Negara (PLN), Indonesia's state-owned utility company, intending to erect Southeast Asia's largest floating solar power plant to explore green hydrogen opportunities.

The deal was signed by Mohamed Jameel Al Ramahi, Masdar's CEO, Darmawan Prasodjo, President and Director of PLN Group, and Ruly Firmansyah, President of PLN NP, at the UN's climate change conference COP28 in the UAE, said the company.

Additionally, the deal has already resulted in the launch of one of the largest floating solar power plants, the Cirata project.

Located on the Cirata reservoir in West Java, Indonesia, Masdar said the plant was inaugurated earlier this month with the ability to generate enough renewable energy to power about 50,000 homes while displacing 214,000 tonnes of carbon emissions per year.

In early December, the company also signed a deal with RWE, a North Rhine-Westphalia-based utility firm, to invest 11 billion euros (USD) in the UK's renewable energy sector. Masdar said it looks to acquire a 49% stake in RWE's 3 gigawatt (GW) Dogger Bank South (DBS) projects, and the deal is expected to close in the first quarter of 2024.

“WE WERE EXTREMELY PROUD TO INAUGURATE THE 145MW (192MWP) FLOATING SOLAR POWER PLANT WITH OUR VALUED PARTNERS EARLIER THIS MONTH, THE CIRATA PROJECT SHOWS HOW INNOVATION CAN BE USED TO MEET MULTIPLE NEEDS AT ONCE”

AL RAMAHI.

With Cirata's robust economy and abundant renewable resources, Southeast Asia is a key investment destination for Masdar, through our deepening cooperation with PLN, the firm will continue to pioneer innovation in solar, green hydrogen, and other key areas in support of the region's energy transition, added Al Ramahi.



GULFSTREAM COMPLETES FIRST EVER TRANS-ATLANTIC FLIGHT ON 100% SUSTAINABLE AVIATION FUEL

BY ANNE FLORENTYNA

Aviation firm Gulfstream Aerospace Corp said it completed the world's first ever trans-Atlantic flight using 100% sustainable aviation fuel (SAF).

The company said this flight was accomplished with the Gulfstream G600 aircraft on November 19. The flight took off from the company's headquarters in Savannah and landed 6 hours, 56 minutes later at Farnborough Airport in England, added the firm.

Gulfstream G600 is part of the next generation models designed by the company. First ever G600 was sold to a customer in the United States on August 8, 2019. This milestone came about a month after the model earned its U.S. Federal Aviation Administration type and production certificates.

The aerospace company said it was powered by Pratt & Whitney PW815GA engines, both using 100% SAF. The company said this mission displayed the potential for aviation's future use of renewable fuels, featuring lower carbon, sulfur and aromatics.

The data collected from this endurance flight will help Gulfstream and its key suppliers gauge aircraft compatibility with future low-

aromatic renewable fuels, particularly under cold temperatures for extended flight durations, added the company.

Mark Burns, president at Gulfstream said,

“ONE OF THE KEYS TO REACHING BUSINESS AVIATION'S LONG-TERM DECARBONIZATION GOALS IS THE BROAD USE OF SAF IN PLACE OF FOSSIL-BASED JET FUEL.”

The company said, World Energy produced the SAF used on the flight and it was delivered by World Fuel Services. The fuel contained 100 percent Hydroprocessed Esters and Fatty Acids (neat HEFA), which has at least 70% lower lifecycle CO2 emissions than fossil-based jet fuel, helping to reduce aviation's impact on climate, said Gulfstream.

In late October, Gulfstream Aerospace completed its expansion of manufacturing facility in the Savannah-based precision for Gulfstream G400, Gulfstream G500 and Gulfstream G600. The company said this expansion increases its facility's capacity by 142,000 square feet/13,192 square meters.

FAB TEAMS UP WITH ENGIE TO IMPROVE DECARBONISATION SOLUTIONS

BY MATILDA DENSON

First Abu Dhabi Bank (FAB), one of the largest banks in the United Arab Emirates, confirmed its partnership with low-carbon energy and services provider ENGIE Solutions by signing a memorandum of understanding (MoU)

This partnership is aimed at advancing the companies' capabilities in financial decarbonisation solutions. The bank stated the agreement was signed at the COP28 climate conference in the UAE, and it highlighted the objectives for the companies to collaborate on related to energy transition and decarbonisation.

The UAE-based bank also said the MoU builds on the capabilities of FAB



Carbon Desk, which provides carbon trading and financing options, facilitates strategic carbon-related transactions, and promotes the development of high-quality carbon credits and offsets for corporate and investment banking clients.

FAB said the partnership paves the way for exploring

new types of deals in the future. Varun Gujral, chief executive of Global Energy Management and Sales (GEMS) APAC at ENGIE, said the MoU marks a significant milestone as ENGIE GEMS and FAB join forces to strengthen the company's capabilities in driving energy transition across the Middle East and beyond.

"Market-led solutions, such as trading in high-quality carbon credits, will play an essential role in the UAE, regional and global net-zero transition, providing industries with practical tools for achieving decarbonisation targets," he also said.

The bank also said it will lend, invest, and facilitate over 500 billion United Arab Emirates dirhams (\$136 billion) in sustainable and transitional financing (green finance) by 2030, on Tuesday. FAB said it is expanding its target to include transition financing and early-stage innovation.

Finance company First Abu Dhabi Bank, headquartered in Abu Dhabi, provides expertise and financial strength to support local, regional, and international businesses through its products and services.

ADNOC, SOCAR PARTNERS TO DEVELOP TECHNOLOGIES FOR LOW CARBON ENERGY

BY SWATHI

Oil and gas producer Abu Dhabi National Oil Company (ADNOC) and peer State Oil Company of Azerbaijan Republic (SOCAR) signed a strategic collaboration agreement (SCA), with an aim to develop potential technologies for low carbon energy.

The recently executed agreement was undersigned by both companies as founding members of the Oil and Gas Decarbonization Charter at COP28, targeting to eliminate routine flaring and zero out methane emissions by 2030 and achieve net zero by 2050.

The partnership of the companies entail collaborative efforts to advance blue hydrogen, carbon management, and geothermal technologies, said the firm. Also, these initiatives look to expedite the decarbonization of energy systems in UAE, Azerbaijan, and other pivotal markets, aligning with their respective net-zero objectives, added the company.

“Through this agreement ADNOC and SOCAR will leverage our combined knowledge, experience and expertise to advance promising hydrogen, carbon management and geothermal technologies that could make a tangible difference as the world takes bold steps to decarbonize energy value chains,” said Musabbeh Al Kaabi, executive director of ADNOC.

The newly build partnership includes 30% stake held by ADNOC in Absheron gas and condensate field in Azerbaijan sector of Caspian Sea, said Abu Dhabi Government owned firm.

ADNOC said earlier it has earmarked 55 billion



United Arab Emirates dirhams (\$15 billion) for expedited development of low-carbon solutions, new energies, and decarbonization technologies, targeting a 25% reduction in carbon intensity by 2030 and aiming for net zero by 2045.

The Abu Dhabi-based firm has established its first project of geothermal district cooling in Masdar City. This is the first project taken by ADNOC in gulf region to harness geothermal energy.



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Youssef Tawakol

*Simulation and Optimization Engineer
Schneider Electric*

Youssef is currently working as a Simulation and optimization engineer in Schneider Electric since June 2022. He worked on Operator training simulation (OTS), Leak detection system, dynamic studies, and optimization projects using AVEVA products. He has previous experience in 2020 for Onspec Tawakol which is Aspen tech partner in Egypt as being a process engineer, process simulation engineer and sales engineer. Prior to which, he was working from 2019 until 2021 as a teacher assistant in Cairo university tutoring several courses. Artificial Intelligence (AI) has invaded the oil and gas field, which he was a part of the team using the AI model builder using Aspen HYSYS besides his base knowledge on how to use Python.

Artificial Intelligence's Revolutionary Effect in the Oil and Gas Sector

Firstly, the oil and gas industry is not an exception to the overwhelming force that artificial intelligence (AI) has emerged to transform sectors around the globe or even the whole world. AI is transforming the way businesses search, extract, and process hydrocarbons. It does this by analyzing large volumes of data, improving efficiency, and optimizing operations. AI is invading this sector with its different fields starting from exploration to processing.

As in Exploration and Management of Reservoirs:

AI has shown to be quite useful in the exploration stage for locating possible sources of gas and oil. To identify the best places to drill, sophisticated algorithms examine seismic data, geological studies, and information from previous drilling operations. This lessens the influence on the ecosystem while simultaneously lowering the risk of exploration.

AI is also very important for reservoir management. It makes it possible to forecast possible problems, optimize extraction techniques, and monitor reservoir conditions in real-time. As a result, recovery rates are increased, and the life of oil and gas resources is prolonged.

Also, in Drilling and Optimizing Production:

By detecting equipment breakdowns, minimizing downtime, and optimizing drilling parameters, AI-driven technologies are improving drilling processes. Intelligent drilling systems improve

accuracy and efficiency by analyzing historical drilling data and making modifications in real-time using machine learning algorithms.

AI is used in industrial optimization to maximize output while lowering operating expenses. By anticipating possible equipment faults and acting before they happen, predictive maintenance models minimize downtime and guarantee continuous output.

Not to forget about Impact on Environmental Quality and Safety:

In the oil and gas sector, operational safety is a primary concern, and artificial intelligence is making a substantial contribution to this goal. Real-time anomaly detection by AI-powered sensors and monitoring systems warns of possible dangers before they happen. By taking preventative measures, workplace safety is

guaranteed, and accidents are reduced for staff members. Moreover, artificial intelligence is helping to reduce the environmental effects of oil and gas activities. Businesses can attain more sustainable practices through process optimization and waste reduction. By using AI algorithms, the sector may comply with international environmental requirements by managing wastewater, monitoring pollutants, and implementing eco-friendly practices.

Even in Intelligence on markets and supply chains:

By streamlining procurement, inventory control, and logistics procedures, artificial intelligence helps the oil and gas supply chain make better decisions. Businesses may make well-informed judgements about production levels and pricing strategies by using predictive analytics to help them anticipate market changes.





Companies investing in AI:

AI has taken part of each company budget as according to an EY survey “92% of oil and gas companies around the world are currently or planning to invest in AI” like Haliburton, Shell, BP, ExxonMobil, Baker Hughes, AVEVA, and Schneider Electric in the upstream and downstream fields.

Although the market is floating in the digital transformation part according to Forbes “AI in oil and gas, Mordor Intelligence projects will hit \$2.38 billion by the end of 2023, rising to \$4.21 billion by the end of 2028” which means almost

double the budget in only 5 years, which shows the potential and the will that oil and gas companies have towards AI.

Finally, AI is revolutionizing the oil and gas sector by providing hitherto unseen chances for improved productivity, sustainability, and safety. Businesses in the industry must accept and adjust to these developments as technology develops further. An industry that is more robust and competitive will emerge from this, and it will also be in line with the more general objectives of environmental stewardship and sustainable resource management.



Vinay Prakash
Digital Executive Officer
Business Tabloid

The Future of Energy: AI, Machine Learning & IoT at Home

AI, machine learning and IoT are 3 buzzwords that has been heard over and over since the last few years. But is that all there is?

A deep dive into the energy sector will reveal how pivotal the 3 are in unlocking the future of energy.

Buzzwords to functionality:

AI has come to the limelight ever since the advent of Chat GPT and its first interaction with the public. Machine learning has been with us since Google chose to understand consumer preferences through data collection and algorithms. Today's machines with the help of AI go through a set template, self-replicating functions and at some points do not need human intervention for the tasks or functions.

IoT or Internet of Things is the pivotal bridge between AI & Machine Learning. They are devices whose sole purpose is to collect a set amount or pre-programmed data to feed into machine learning.

AI is the great enabler that helps a machine or IT system to replicate human efforts through recognition, decision-making & problem solving.

This is where software, hardware (IOT) and machine learning come together to optimize and play a huge role in a low emissions future.

The Rise of Adaptive Intelligence in the Energy Sector:

In an era where climate change is the ultimate goal of nations and countries, so too are the rise

A dynamic Digital Marketer, Content Writer, and Social Media Specialist with over 13 years of versatile experience across diverse industries with exposure across sectors such as Oil & Gas, Corporate Services, Media, Events, FMCG, Facilities Management, IT, Software, and e-Commerce. Passionate in this new AI revolution to learn, utilize & educate the masses on honing their skills and adaptability required to be a part of Artificial Intelligence in our daily lives.

of the transition into renewable energy production. That being said, smart allocation of resources and energy play a vital part of that goal.

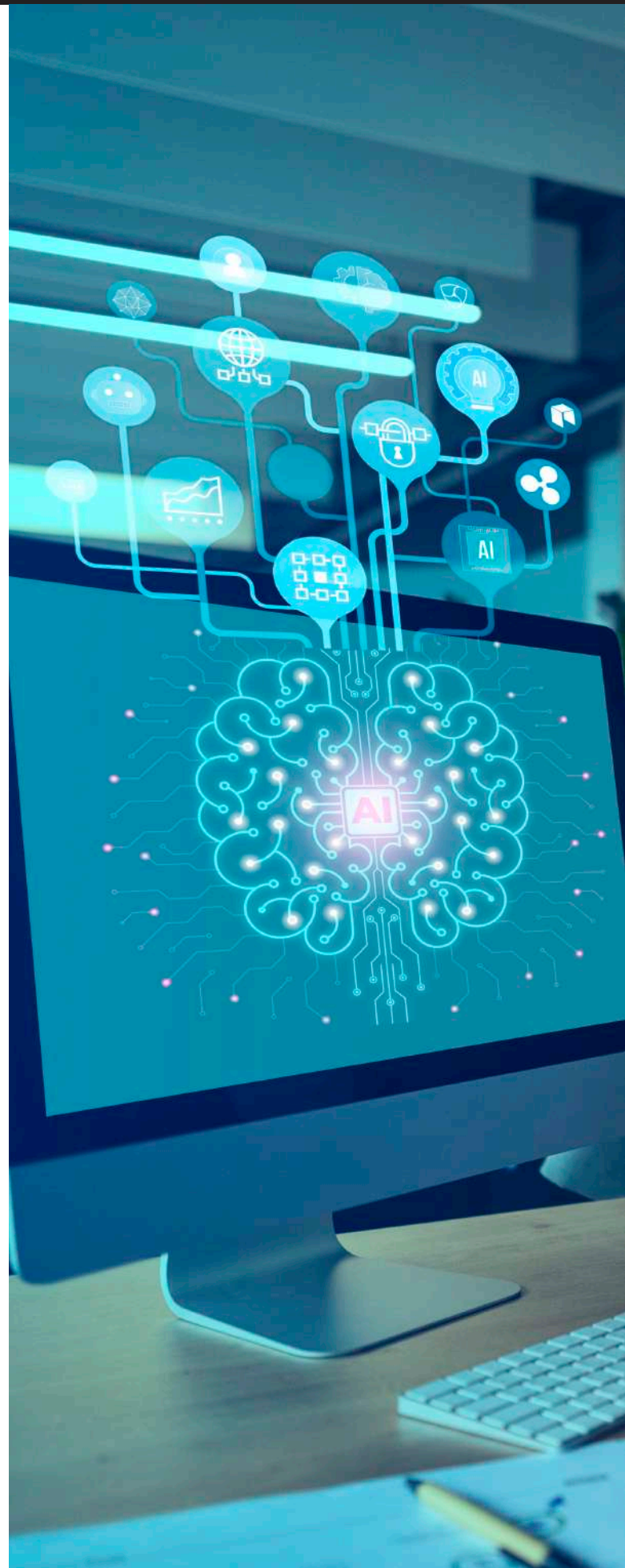
This means that there will also be a rise in utility companies using the required computing power of companies like Microsoft, Azure computing and Azure machine learning. AMD and even Nvidia, the 2 giant graphic chips manufacturer has been supporting virtual simulations for renewable energy companies to run the ever-increasing equipment that both power our home and monitor the energy consumed. They use complex simulations in order to get the maximum efficiency to generate power at scale so that switching to renewable energy becomes dependable, efficient, and affordable.

The Impact of Smart Grids in our Home Energy:

The smart grid comprising of IoTs, Machine Learning & AI doesn't stop with just the builders and producers of energy platforms but where we can do our part through the installation of smart devices plugged directly into the home, thereby controlling energy consumption, predicting home power usage, detecting power leaks that wastes energy. Even simpler tasks like turning on the air-condition or the heater, before reaching home, auto -off functions of both home appliances and lights when leaving home, increasing the efficiency at home, thus reducing the high-power usage. The smart grid is simply an interconnected system made effective by the community of people who make sure that energy usage is not wasted.

Conclusion:

Those who choose to welcome these technologies will benefit not only in cost savings, but contribute to a more sustainable and greener future.





Leonard Rodrigues

*Acting Managing Director, Head of Revenue Management and Network Planning
Etihad Cargo*

Leonard is currently the Acting Managing Director, leading the company's strategic development. He joined Etihad Cargo's senior management team as Head of Revenue Management and Network Planning in February 2020 and is responsible for revenue management, pricing, analytics, network and commercial planning. He is also the lead for strategic partnerships and alliances. Prior to which, he accumulated over 16 years' experience, holding senior positions at Air France, KLM and Qatar Airways. Leonard holds a double Master's of Science degree from Ecole Polytechnique and Telecom Paris, as well as an Executive MBA from Insead. He also speaks fluent French, English and Japanese.

ENHANCING CONNECTIVITY, PREMIUM PRODUCTS TO DELIVER ON SERVICE PROMISES

Cargo and logistics arm of Etihad Airways and national carrier of the UAE, Etihad Cargo has set its sights on growth, taking advantage of the strategic location of the carrier's Abu Dhabi hub to provide greater connectivity and depth across its global network. From adding new destinations and increasing frequencies to enhancing its product offering, Etihad Cargo has taken a customer-centric approach to growth and has adapted to face challenging market conditions and meet cargo capacity requirements.

2023 saw the carrier enter into a reciprocal blockspace agreement with China's SF Airlines. Building on the successful collaboration between the two carriers, Etihad Cargo's inaugural flight to Ezhou Huahu Airport touched down in August, making the UAE carrier the first international airline to operate flights to Asia's first professional cargo airport. Since then, Etihad Cargo has increased the frequency of its freighter service to twice per week, and the introduction of Ezhou to Etihad Cargo's Chinese network has enabled the carrier to offer greater connectivity to China's five national-level city clusters via the airport's transportation infrastructure, including railway, waterway, expressway and air links.

The addition of the firm's new Abu Dhabi-Ezhou route enables Etihad Cargo to provide customers and partners with seamless connectivity across the Chinese market. Etihad Cargo's partnership with SF Airlines has enabled the management to add depth to our Chinese network by providing additional online feeds into Etihad's expanding

passenger network and offer greater access to 25 domestic Chinese destinations via road feeder services.

Ezhou is the latest addition to Etihad Cargo's growing freighter network, which, in combination with the airline's passenger network, supports growing capacity demand for Etihad Cargo's premium products, which include a specialized product dedicated to e-commerce and the carrier's IATA CEIV Pharma-certified PharmaLife, which accounts for 20 per cent of Etihad Cargo's total volumes for China.

While China is a top destination for our PharmaLife product, it is not the only region where the company is witnessing high demand for a safe and reliable pharmaceutical transportation solution. Since launching PharmaLife in 2020, Etihad Cargo has achieved year-on-year growth, and it has increased pharmaceutical and life sciences volumes by 17 per cent YTD versus 2022, surpassing the 10,000-tonne mark for the first time in its history. This demonstrates the effectiveness of the strategies the logistics firm has in place, including leveraging local expertise via its Pharma Champions programme and

the continuous enhancement of PharmaLife features.

Etihad Cargo has made significant investments in its PharmaLife product, launching a state-of-the-art pharmaceutical hub in Abu Dhabi to double its cool chain handling and storage capabilities and introducing dedicated thermal covers to mitigate the environmental risks associated with transporting this temperature-sensitive cargo. The carrier has also continued to enhance its other products, enabling the carrier to achieve growth across a number of sectors, including the transportation of perishables and live animals.

With an eight-strong premium product range, the company tailors the products and services it provides for its customers and partners to maximize capacity across Etihad Cargo's global network. Being adaptable and responsive to its customer requirements and market challenges has enabled Etihad Cargo to continue on its growth trajectory. We will continue to work closely with the company's partners and customers so it can remain the air cargo partner of choice and enhance the solutions the firm provides to fully meet their cargo capacity demands.



SOURCE: <https://www.etihadcargo.com/en/>



FROM LEFT: Anish Racherla,
CEO & Co-Founder, REGENY

Anant Jain
Co-Founder, REGENY

Anish Racherla: Prior to starting Regeny, Anish was part of the founding team at Finneva Holdings, an ecommerce business, leading its fintech strategy. Before that, he was the global head of strategy and programmes at Finabl, a London-based global payments firm.

Anant Jain: Anant was working with ADIB in their Wholesale Banking Group prior to Regeny. He also worked previously with Finabl and Finneva Holdings in Corporate Strategy and Fundraising roles.

REVOLUTIONIZING TRANSPORTATION THROUGH INCREASED EV ADOPTION

In the quest for a sustainable future, the rise of electric vehicles (EVs) has emerged as a beacon of hope. At the forefront of this transition stands Regeny, a dynamic platform that doesn't just facilitate EV charging but actively promotes a greener and lower carbon emission mobility landscape. Currently, less than 1% of the total vehicles in the UAE are electric, presenting a huge opportunity with the government aiming to reach 50% of cars on roads to be electric.

Quantifying Environmental Gains

Traditional ICE vehicles have long been contributors to the carbon footprint, releasing harmful emissions that adversely affect the environment. Regeny recognized the urgency of mitigating this impact and set out on a mission to revolutionize the way we move through increased adoption of New energy vehicles. The platform has successfully contributed to the reduction of 10t per month of carbon emissions. This achievement is not just a statistic; it signifies a tangible shift toward cleaner and more sustainable modes of transportation.

User-Centric Innovation

At the heart of Regeny's success is a commitment to user experience and removing friction from the EV usage experience. The platform, designed with the user in mind, provides

- a) real-time information on nearby charging stations;
- b) community and knowledge center for all EV stakeholders to interact;
- c) marketplace of EV specific services.

This ease of access and convenience break down barriers, making EV ownership an attractive and viable option for a broader demographic.

A Robust Charging Infrastructure

The impact is tangible through our expansive network of strategically positioned charging stations. This network addresses a critical challenge in the EV ecosystem, ensuring that users have reliable and convenient access to charging points. The result? A surge in EV adoption as the barriers to entry diminish. We are witnessing close to 50% month on month increase in the charging sessions on our charging stations showcasing a pertinent gap in the current infrastructure.

Collaborative Eco-System

Through strategic collaborations with manufacturers, suppliers, and utility providers, Regeny is actively shaping a comprehensive ecosystem that supports and amplifies the benefits of EV adoption. These partnerships not only expand our reach but also contribute to the overall growth of the electric mobility sector.

Paving the Way Forward:

Connected New Energy Mobility Regeny is a force driving the new energy revolution in mobility through its platform. By facilitating increased EV adoption, we are hoping to actively shaping a future where our vehicles are not just modes of transport but contributors to a healthier planet. As our brand steers towards a more sustainable horizon, it beckons individuals and businesses to join the journey toward a greener, cleaner, and more responsible tomorrow.





Stephan Nilsson is the executive chief of UNISOT, with a strong foundation of 30 years of experience in professional and international IT, boasting two decades of technical expertise in SAP. Nilsson also has five years of experience as a Mechanical/Automation Engineer and as a Technical Instructor. He specializes in ERP Blockchain Integrations and serves as a Solution Architect and Team Leader. UNISOT is a Web3 Supply Chain Traceable and Sustainability Platform designed to revolutionize the way businesses handle their supply chain processes.

Stephan Nilsson
CEO
UNISOT

TRANSFORMING SUPPLY CHAINS THROUGH BLOCKCHAIN & AI

BY ANNE FLORENTYNA

In the rapidly evolving world of supply chain management, UNISOT emerges as a beacon of innovation. Founded in 2018 by Annemie Bergmans, Caroline Nilsson and Stephan Nilsson, UNISOT is a web3 platform that is transforming global supply chains through traceability and sustainability. Their unique approach addresses the longstanding issue of data silos, enabling secure and cost-effective global data exchange.

The idea for UNISOT was born from a simple need – to identify products free from specific ingredients. This led to the development of an app that could scan products and provide instant feedback on whether they meet the user's preferences. However, the founders quickly realized the broader potential of their technology in streamlining supply chains.

Traditionally, companies relied heavily on ERP systems like SAP for data transfer. But the landscape has changed. Modern markets demand agility, often leading to frequent changes in suppliers and distributors. This shift has resulted in a regression to more manual methods of communication, such as emails and phone calls, for data exchange.

In the current dynamic market environment, companies frequently change their suppliers and distributors. The rapid pace of these changes makes it impractical to develop new point-to-point interfaces for each new supply chain partner. Consequently, many businesses revert to traditional methods like manual emails, phone calls and messaging for transmitting data like orders and invoices.

Reflecting on this trend, Nilsson observed, "A decade ago, we were in a better place with more digitization and less manual intervention. Today, supply chains have regressed to being less digital and more manual, a shift that has highlighted their inefficiencies and instabilities, especially during the recent pandemic." His exposure to blockchain and bitcoin in 2012, through Satoshi Nakamoto's whitepaper, sparked the idea of utilizing blockchain as a universal data layer. This technology enables seamless global connectivity, allowing companies to securely

exchange information over a public blockchain network, just as how we use the internet for various purposes.

This insight led to the creation of the UNISOT Web3 Supply Chain Traceability Platform by the UNISOT team. They envisioned a platform similar to public blockchain, where companies could network and engage in secure communications, thereby overcoming the current inefficiencies in supply chain management.

The Digital Product Passport

A key tool of UNISOT is the Digital Product Passport. When a product is scanned, the passport provides detailed information about its ingredients, origin and the product's journey. UNISOT creates opportunities for producers and manufacturers to directly offer verified, firsthand data to their consumers, eliminating the need for intermediaries.

The information directly supplied by the supply chain companies encompasses the origin of the product, the ratio of raw materials utilized, any waste generated, the conditions under which it was produced, and the carbon emissions involved in its creation, among other details. This level of detail effectively eliminates misunderstandings and misinterpretations at various stages.

For consumers seeking specific details, this blockchain based platform, accessible to the public, facilitates direct connections across the entire supply chain, from producers, logistics, and inventory management to transportation, and from supermarkets and retailers to restaurants.

Nilsson notes that according to Gartner's hype cycle, AI is currently at its zenith, whereas blockchain reached this peak around 2017-18 and is now in the "Slope of Enlightenment" phase with early adopter and starting to enter the "Plateau of Productivity" where growing numbers of organizations feel comfortable with the now greatly reduced levels of risk. He points out that the shift towards "Private blockchains" by major corporations like IBM, SAP, Microsoft and others stemmed from a desire to maintain control over data within their organizations.

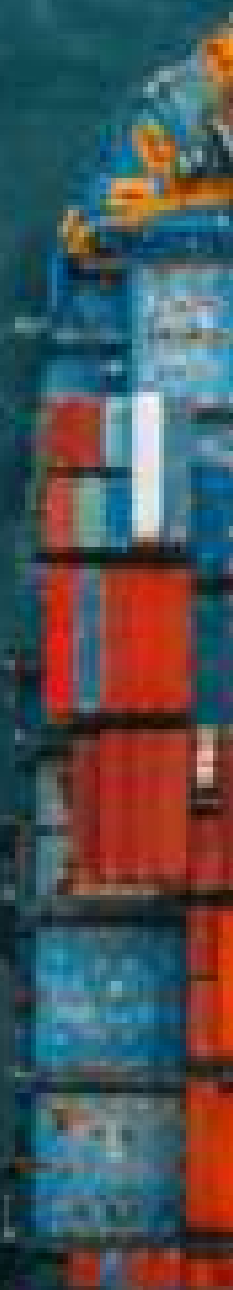
UNISOT

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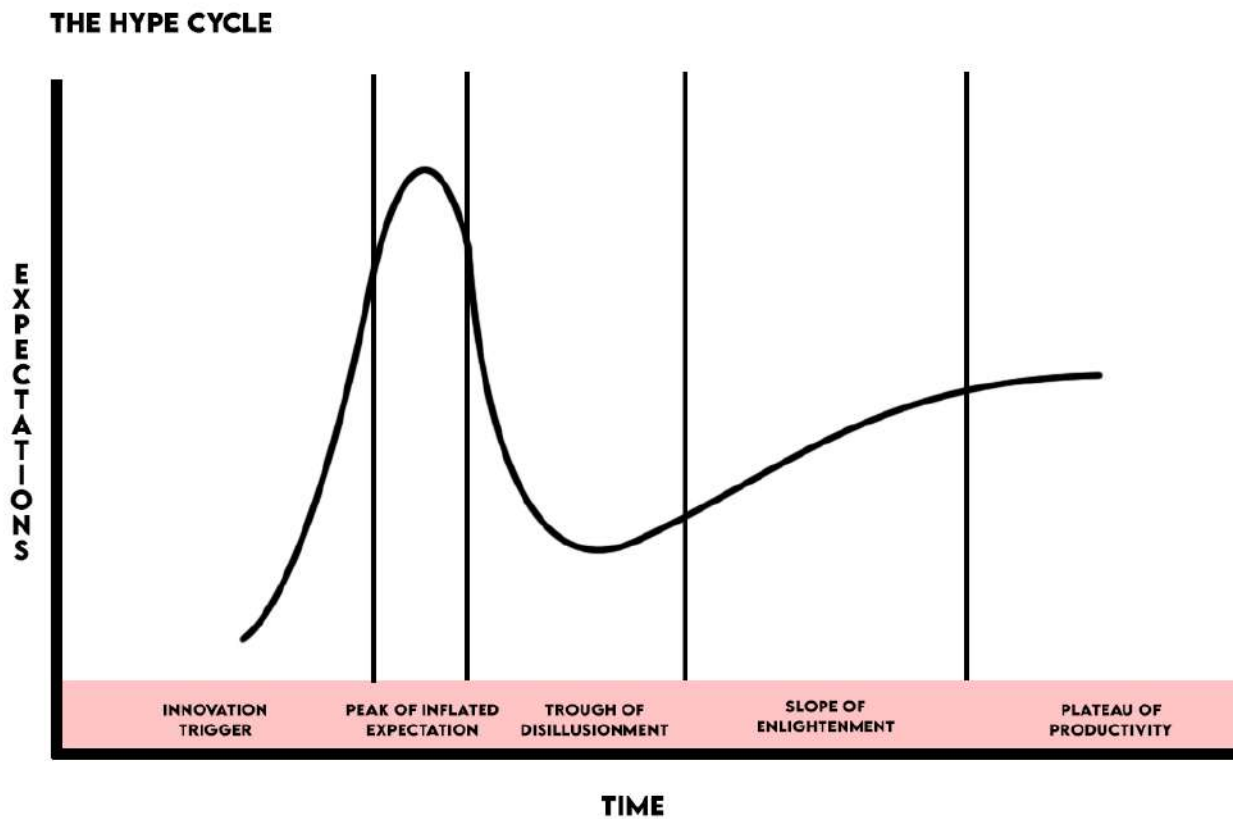
DIGITAL PRODUCT PASSPORT



2023

ABILITY PLATFORM TO CONSUMER

PRODUCT DNA
POWERED BY
SMART DIGITAL TWIN
TECHNOLOGY



The challenge with these private blockchains is that they often involve consortia of companies operating a shared distributed database, with shared incentives to produce “correct” data. This approach can sometimes lead to misleading data.

In contrast, public blockchain offers the advantage of being tamper-proof, ensuring that no single entity or organization can alter the data. This ensures data Confidentiality, Integrity and Availability (CIA) – key benefits of public blockchain and web3 technologies. Moreover, this system allows users to own their data and control who accesses their data as well as the power to monetize it.

In the context of supply chains, UNISOT enables its customers to assign monetary value to specific data points like location, temperature or weight, creating new revenue streams through micro-transactions. Nilsson cites the example of a farmer who can monetize valuable information such as rainfall, temperature and soil quality, which is beneficial not only to him but also to

industries like insurance and investment. This approach allows the farmer to earn additional revenue by selling this data, embodying the concept that “data is the new oil.” UNISOT provides its clients with tools to authenticate their products’ quality and origin and to monetize their data.

Leveraging this capability, the company launched SeafoodChain in Norway in 2020, just before the COVID-19 pandemic. Since 2023, they have seen a global expansion, with customers in Dubai, USA, Australia, Germany, Sweden, and more.

Global standards

The aim here is to validate the quality of the products being sold. Presently, most products feature a barcode with a GS1 (Global Standard 1) GTIN number. However, the future is shifting towards 2D codes i.e. QR-codes. QR-codes offer enhanced functionality, allowing for Smart Links that can be scanned at checkout points for payment as well as by consumers to access a

product's "Digital Product Passport" with a smartphone. This passport reveals comprehensive details about the product, including quality assurance.

A significant regulatory change is on the horizon in Europe, with regulations set to be implemented in 2026 mandating that every product, whether it's clothing, electronics, or any other retail item, must have a Digital Product Passport. This requirement will apply to products both imported into and exported from Europe.

Currently, the company is engaging with the Energy sector in Norway to heighten awareness and expand its client base, focusing on the traceability and safety of equipment, asset security, and related areas.

Nilsson highlights the intriguing intersection of public blockchain and AI, particularly addressing the prevalent issue of data privacy in AI. He notes the risks associated with centralized AI systems, including the potential for data breaches and the loss of data control. Centralized AI systems require substantial bandwidth to transfer large volumes of data and consume significant energy for centralized data analysis.

Federated Learning

UNISOT is developing a distributed AI system, also known as Federated Learning. This approach allows each company within the supply chain to conduct analytics on their data locally, rather than centralizing all data, thus enhancing data privacy. These companies then compile and share their insights, contributing to the collective knowledge of the complete supply chain.

If organizations adopt this model of local data analytics and contribute their insights to a shared aggregator, it ensures that the original data remains secure. Public blockchain facilitates the distribution of these insights, enabling companies to monetize the analytical data they provide.

This system also opens up a new marketplace for analytics and algorithms, where companies

that develop effective algorithms can receive economic incentives. A critical aspect of AI is the trustworthiness of data. By integrating public blockchain with AI, data accountability is strengthened, providing clear traceability of data origins.


In the current digital landscape, there's a risk of malicious entities introducing false or misleading data, potentially skewing AI outcomes. However, with public blockchain serving as a layer for data integrity and data distribution, it enhances the auditability of information, thereby bolstering trust in AI-driven data available online.

One of the greatest challenges

Despite its innovative solutions, UNISOT often faces misconceptions. The company is not about blockchain services; it's about enhancing supply chain efficiency and implementing digital product passports. The common association of blockchain with cryptocurrencies or crypto tokens sometimes overshadows UNISOT's core mission.

Lastly, Nilsson points out that the current inefficiency in supply chains, from sourcing raw materials to reaching the end consumer, is a major factor hindering global economic growth. This inefficiency, exacerbated by high inflation and ongoing concerns about economic recession, has kept supply chain efficiency alarmingly low – around 20% globally, with Japan leading at a slightly higher rate and Germany at 17%, the rest of the world supply chains have even lower aggregated efficiency.

This inefficiency leads to substantial waste, estimated at over 80%, encompassing food, energy and financial resources, contributing to overall unsustainability. UNISOT firmly believes that the integration of public blockchain with AI has the potential to address these inefficiencies, thereby enhancing the growth and effectiveness of supply chains. Such advancements could lead to improved return of energy investments (EROI) and significant reductions in waste, ultimately contributing to a healthier global economy.

A professional headshot of Rasso Jörg Bartenschlager, a middle-aged man with short brown hair, wearing black-rimmed glasses, a dark suit jacket, a white shirt, and a blue tie. He is smiling slightly and looking directly at the camera against a plain grey background.

Rasso Jörg Bartenschlager
General Manager
Al Masaood

Rasso Jörg Bartenschlager is solution-driven, and his can-do attitude led to many notable achievements. This includes rewards for Volvo Penta Aftermarket importer of the Year in 2016 and Yacht Support Center in the Middle East in 2018, among many others. Rasso started his career as a Mechanic, Service Engineer, and Supervisor in the South of Germany where he worked with the Local Mercedes-Benz partner Autohaus Allgäu. He joined the great Al Masaood family business in 2014 as General Manager of the Group's Power Division, overseeing MTU, a Rolls-Royce Power Solutions company, Volvo Penta and LeroySomer businesses within the Group for the United Arab Emirates & Bahrain. After celebrating 50 years of Al Masaood, Rasso is proud to drive the Group into a new era of its legacy, powered by mobility solutions and digitization.

**ALL ON OFF-GRID CHARGING SOLUTION FOR
ELECTRIC VEHICLES, HYBRID MARINE VESSELS**



BY ANNE FLORENTYNA

Can you please give us an overview of the current state of Shams+ EV battery technology?

With the world embracing sustainability in the face of the urgent need to decarbonize, reduce emissions and mitigate the climate crisis, electric vehicles (EVs) are the future of transportation, whether commercial or personal.

One such home-grown brand that is leading the technological charge in the region is Al Masaood Power Division - part of the Al Masaood Group, one of Abu Dhabi's leading business conglomerates – with its SHAMS+ Charge, which is among the innovative green energy solutions being explored in the region.

SHAMS+ Charge is a game-changing off-grid charging solution for electric vehicles (EV) and hybrid marine vessels that are completely home-grown and manufactured in the UAE. It uses another source of energy, an even more abundant one that the Middle East is equally blessed with, this energy source is solar power.

What kind of technological advancement has Al Masaood Power taken which is comparatively unique in the market?

At Al Masaood Power, we are committed to leading the way towards a sustainable future in the UAE. SHAMS+ Charge not only reaffirms our dedication to promoting electric and green mobility but also supports the ambitious clean energy goals of the UAE.

This unique and pioneering solution aims to enhance connectivity and deliver a seamless plug-and-charge experience, contributing to the wider adoption of electric vehicles and marine vessels in the region.

Can you tell us about your off-grid solar charging system for hybrid marine vessels and how is that a better alternative in terms of batteries?

By generating and storing renewable energy on-site, off-grid EV charging solutions reduce reliance on fossil fuels and minimize carbon footprints. Embracing the concept of green mobility, the UAE is especially focused on promoting the development of off-grid charging infrastructure. Its forward-looking national agenda places significant emphasis on sustainable modes of transportation and aims to achieve approximately 42,000 electric vehicles on its roads by 2030.

It is in this scenario that SHAMS+ Charge assumes even greater importance. SHAMS+ Charge enables fast and sustainable battery charging using solar energy, with a network of charging stations serving the automotive and maritime sectors. The solution is equipped with smart features to ensure stable charging and can be installed cordlessly for maximum convenience and flexibility in various locations, including agricultural areas and marine ports.

This marks yet another significant milestone in our sustainability endeavours. SHAMS+ Charge is the first off-grid ultra-fast and smart charging

solution, designed to decarbonize the transport industry and catalyze electric vehicle adoption in the construction, industrial, and marine sectors.

How do you think the integration of renewable energy sources, such as solar and wind, is affecting the development and deployment of EV charging infrastructure?

Our future sprawling network of charging stations caters to the battery needs of the automotive and maritime sectors, even in the most remote and inaccessible areas. What sets SHAMS+ Charge apart is its reliance on solar power input and output harnessed from BESS (Battery Energy Storage Systems), making it a scalable and flexible solution that can be installed in a wide range of rural and urban locations.

With the “cutting-edge technology” that SHAMS+ Charge employs, users can experience the highest charging speeds possible and achieve a range extension of over 100km in just 10 minutes.

Looking ahead, what emerging technologies or breakthroughs do you anticipate in the EV battery and charging station industry that could further accelerate the adoption of electric vehicles?

The global momentum towards sustainability and decarbonisation has brought EVs to the forefront as a promising solution against greenhouse gas emissions and climate change.

A Frost & Sullivan report projects the Middle East EV market to see an impressive compound annual growth rate (CAGR) of over 25% between 2021 and 2027. However, the widespread adoption of EVs presents challenges in terms of charging infrastructure and its environmental impact.

Enter off-grid EV charging solutions - such as SHAMS+ Charge. This is a technology that not only supports sustainability but also accelerates the decarbonisation process. Off-grid EV chargers represent a sustainable and decentralized solution to address the limitations of traditional charging infrastructure. Owing to their potential to harness clean energy, the global





market for off-grid EV chargers is expected to reach an impressive value of \$2.9 billion by 2031, driven by an increasing adoption rate of eco-friendly mobility options and strong government support, according to IDTechEx.

What innovative solutions are being developed, in terms of battery recycling and sustainability?

Al Masood Power takes pride in its pioneering efforts to provide power solutions that cater to the energy needs of the UAE, he adds. In pursuit of these efforts, it has over the years introduced several firsts in the region, including world-class hydrogen-powered electric generators in the UAE.

Al Masood Power also offers unrivalled expertise in power generation systems and industrial diesel engine applications, representing prestigious brands like MTU, Volvo Penta, and Leroy Somer in the UAE and Bahrain.

And now, in its pursuit of a sustainable future for generations to come, Al Masood Power has launched its off-grid charging solution brand, SHAMS+ Charge.

As trailblazers in the energy sector, we remain dedicated to steering the transition towards sustainable and green energy. Our mission is to introduce cutting-edge technological solutions that make a tangible impact. The launch of our SHAMS+ Charge is a significant milestone in our sustainability endeavours and solidifies our position as leaders in the energy sector in the UAE.

As the first fully manufactured charging solution in the UAE, SHAMS+ Charge aligns with the UAE Net Zero 2050 strategic initiative to fast-track the transition to a cleaner and greener transportation infrastructure.



Paul Lee
Founder
Innoverse Global Media

Paul Lee, a former Amazon Innovation Lead, recently moved to UAE to re-invent the television experience to counter the growing division mobile phones have introduced. He is passionate about bringing back the communal experiences with Apps that already exist on a new sustainable metal and glass transparent touchscreen OLED TV.

Glorianne Montefrio, a seasoned Sustainability Innovation professional, entrepreneur, and public speaker, brings 25 years of diverse management experience across various industries. Glorianne has played pivotal roles in projects with notable organizations showcasing her proficiency as an Improvement Specialist.



Glorianne Montefrio
Founder
Innoverse Global Media



HOW THE WORLD'S FIRST SUSTAINABLE TOUCHSCREEN SMART TV TO BEING?

BY ANNE FLORENTYNA

Can you give us a picture of your innovation - world's first sustainable touchscreen SmartTV, also share what makes it unique from other television screens?

IGM TV is the First-of-its-kind all glass and metal sustainable TV that is Metaverse-Ready and made to run all your apps that you would run on your phone, but in a group setting. Working to address a pattern of mobile solitude and small text accessibility issues, IGM TV is ready to connect your household, office, or classroom to the world of Apps with full touch interactivity with less plastic. TV is no longer just a black box in the main wall of your living room or office. It's now a stand-alone piece of art that doesn't obstruct your views. Because your background matters.

How did you first come up with the idea of sustainability in an appliance like television? Also, can you please tell us

how you ensure your business practices align with environmental sustainability?

We believe that the trend to make TVs cheaper and lighter centers around more plastics. They also aren't very smart at all. So, we set about creating a metal and glass TV that was smarter than the rest, and as smart as your phone. We wanted to break the pattern of mobile solitude by creating a fully app-capable TV. We wanted to foster awareness that innovation can be fun and that we are committed to sustainability by accepting old TVs as donations to provide schools in the Philippines with access to quality education and engaging workshops. Our mission is to aid poverty, and address inequality, and the global climate crisis with a focus on SDGs 4, 9, 10, 12 and 17.

We observed the company presents a strong emphasis on women with the recent "Women Leaders Roundtable Session on Sustainability". How do you perceive women

to excel in a highly competitive tech world?

We believe that women are just as capable of innovation and technology as men are and encourage more inclusion of both genders as we pave the future for a more inclusive workplace in the UAE with IGM TV. We are proud of our co-founder and CIO, Glorianne Montefrio, who brought more than 20 women leaders in sustainability to the event and was featured in the Women In Tech Magazine. She has been our driving force on sustainability.

What are your initial steps taken to minimize the ecological footprint of your smart TV products throughout their lifecycle?

First and foremost, we strive to reduce the use of plastics in the most basic assembly of all our screens and bases and use OLED technology which has lower power draws. This includes even our non-transparent model that you may be seeing in the future.

Can you let us know who your target audience is? Also, why do you think consumers should switch to your Smart TV?

The target audience for our TVs are households and businesses that want to make a difference in sustainability in their choice of learning and entertainment equipment. For our App, we're targeting GenZ who are born into an age of technology and innovations and comfortable navigating the future landscape of content and app experiences.

When considering the competitive landscape in the smart TV industry, can you highlight its features aside from sustainability?

The biggest feature of our TV aside from sustainability is the connection it brings to your physical world. It's designed for communal App experiences and made for large groups

to connect when consuming educational content and engaging in immersive experiences.

In addition to these features, coming soon, you'll now get rewarded on your engagement in the form of IGM Points, backed by Web3 technologies that will allow you to cash them in for rewards to help purchase educational and sustainable technologies or cash in your points for carbon offsets or any number of other sustainable initiatives. It's time to "Think Big, Learn Better, Make a Difference."

How does your commitment to these environment friendly values translate into a unique selling proposition for your smart TV business?

We're partnering with recycling businesses, media, schools, and governments to make purchasing your new IGM TV more impactful in making a positive change in education and sustainability through our technology. We've raised the specs of our TVs to match what your mobile phones can do to drive greater inclusion and group engagement to bring back the shared content experiences that existed before mobile phones did.

We believe that the best path forward to making a positive difference against the global climate crisis is in reclaiming a sense of Community of inclusion, accessibility, and diversity that can't be achieved with the ever-growing separation mobile phones have introduced into our daily lives.



FLYING CAR WITH AI AS CO-PILOT IS THE FUTURE

BY SWATHI

A native of California, Mr. Bousfield earned a Bachelor of Science with Honors from California Polytechnic State University in 1979. His post-graduate studies included marketing and business management. Mr. Bousfield, as an architect, engineer and inventor, was previously involved in the development of numerous aircraft-industry products including supersonic aircraft propeller technology. He is a successful inventor with seven patents issued. Mr. Bousfield is the designer of the Switchblade Flying Sports Car. His designs have been covered in many notable publications, including Popular Mechanics, Scientific American, and Smithsonian Magazine.

*Sam Bousfield
CEO and Designer of the Switchblade Flying Car
Samson Sky*



What led to the idea of making flying cars a reality? How close is it to the consumer market?

Artists dream the future and in their dreams they see flying cars. This is evident in almost all movies of the future – Star Wars, Star Trek, Fifth Element, Blade Runner. I saw that future too, and decided that the way to get from today where most traffic is on the ground, to a future where most traffic is in the air would be a vehicle, which does a little of both. This way, you can move through a transition, using an adaptable vehicle, which can never be stopped. You would drive when you wanted, and if the traffic is horrible or there is a bridge out, take to the skies and fly over the barriers directly to your destination.

There are several drive/fly vehicles getting ready for production, and the Switchblade is one of those. It is a race to see who can be first, but for us it is also a requirement that we provide a world-class vehicle with right and left-hand drive models for worldwide use.

Very recently, aviation industry has proved that fossil fuel can be replaced by sustainable aviation fuel (SAF). What is the primary source of fuel for your flying cars?

We use unleaded auto gasoline, which is easily obtained from local sources and is lead free, unlike leaded aviation fuel. Since we are a driving/flying vehicle and operating on roads in neighborhoods with children, we did not feel appropriate to operate with anything but unleaded gasoline. We could not ensure that SAF would be as safe to use as auto gas, and so opted for the safest fuel we could.

In addition to my previous question, what alternative fuels are planned for Switchblade to make it more environmentally friendly?

Samson is looking to use a future engine that could run on Hydrogen, and of course as we are a hybrid electric, as soon as batteries are suitable for our use we would love to be fully



electric. Our plans include introducing fly-by-wire electronic flight controls as soon as we prove the safety of those systems, so that we are ready for full autonomous flight.

Can you elaborate on what role AI plays in the efficiency of flying cars? Also, tell us how are you planning to employ AI to help Switchblade carry out its functions?

AI does not figure into our initial plans for vehicles, but we do see that AI could be utilized to increase the efficiency of scheduling and directing both arriving and departing aircraft from most airports. There is a possibility, if consumers desire fully autonomous fly/drive, AI could make that possible. Having AI as a co-pilot, is also a future we see as quite possible for Samson. A little bit of AI help could make much smoother and relaxing flights.

For example, when Air Traffic Control asks you to change to a new radio frequency, AI could acknowledge and change the frequency automatically. We already have autopilot



capability to take off and land without the pilot having to touch flight controls, so it wouldn't take much more to have an AI co-pilot do the same with pilot overseeing operations.

Who do you aim to see as your potential customers or otherwise, as target audience?

Regional Travelers (people who take trips of 300-800 km) are our main customers, as they can use a Switchblade to turn a 10 hour drive into a 3.5 hour fly/drive experience. This includes recreational flights and business flights. We honestly believe, when business people see Switchblade in action, they will want to use a tool as this, to speed up their response or increase the reach of their business operations.

Instead of a sales or service person spending their life on the road and only seeing their family

on weekends, they could fly/drive a Switchblade to their day's appointments and still make it home for dinner.

What is Samson Sky's long-term vision for flying cars in the automobile/aviation industry? Additionally, we would like to know what other exciting projects Samson Sky is working on.

We see the future is Vertical Take-Off and Landing vehicles, but that future is over a decade away as you need to build out an infrastructure (landing places) to enable such vehicles to be reasonably useful. Samson has VTOL designs but has chosen to provide something people can use today, and also well into the future. There are versions of Switchblade that allows Short Take-Off and Landing, which may be additional steppingstones into our flying car future.



**“SUSTAINABILITY IS
INTEGRAL TO OUR
FUTURE PLANS”**

SAYS DHARMESH KOTHARI

*Dharmesh Kothari
Managing Director
Gray Matrix*

He embarked on his entrepreneurial journey at 25, driven by a desire for autonomy and innate business acumen. Focused on customer delight, he transforms challenges into tailored solutions, harmonizing cutting-edge technology with business needs. Dharmesh leverages technology as an enabler, exceeding customer expectations with value-driven solutions. Notably, his creation of talkk.ai, an omnichannel chatbot platform, stands as a testament to his innovative spirit. At its core, the talkk.ai platform harnesses the capabilities of Generative AI, allowing businesses to craft chatbots that engage users in human-like conversations.

What makes your AI chatbot unique from its competitors in the market?

Talkk.ai is an omnichannel chatbot platform. The omnichannel capabilities powered by OpenAI make it unique. We provide SaaS as well as OnPrem solutions. Humanoid, as well as Digital Avatar, can be opted as a service instead of high Capex.

What drove Gray Matrix to delve into AI and robotics? Can you tell us a bit about your humanoid, Arya?

At Gray Matrix, our commitment to innovation and efficiency led us to explore AI and Robotics. Recognizing the transformative impact of these technologies, we aim to push boundaries, enhance productivity, and stay at the forefront of technological advancements.

Aarya is an intelligent humanoid robot, Aarya is designed to integrate seamlessly into various environments, it combines computer vision and advanced AI algorithms like facial recognition, and autonomous navigation, with sophisticated mechanics to achieve human-like interactions. Our goal is to create a versatile and user-friendly humanoid that can contribute to fields such as Banks, healthcare, education, and beyond.

Does the company have any plans on making its products and offerings contribute to a sustainable lifestyle in the future?

Certainly, at Gray Matrix, sustainability is integral to our future plans. Our ongoing work on diverse humanoid form factors aligns with our commitment to innovation. Additionally, our Robot as a Service (RAAS) offering, developed with sustainability in mind from day one, reflects our dedication to not only adapt but also contribute to a more sustainable lifestyle.

We would like to know more about your target audience and customer requirements.

Could you elaborate on that for us?

We are industry agnostic, our solution chatbot aligns with any business that is looking to automate certain processes that are repetitive in nature and wouldn't need human resources to be involved. To say so our target audience spans industries seeking innovative solutions. From healthcare, BFSI and education to manufacturing and beyond, we tailor our products to meet the evolving needs of businesses looking for advanced AI and robotics applications. Customer requirements vary, but our focus remains on delivering customizable, cutting-edge enterprise-level solutions that enhance efficiency, productivity, and overall performance for our diverse clientele.

What would you say are the prime challenges that the company is facing today in terms of adopting advanced technology, robotics and AI?

The prime challenges we face in adopting advanced technology, robotics, and AI include navigating evolving regulatory landscapes, ensuring robust cyber-security measures, and addressing ethical considerations in AI development. Additionally, staying at the forefront of rapid technological advancements and talent acquisition for specialised roles remain key areas of focus to overcome current industry challenges.

What helped Talkk.ai gain more traction amid rising competitors in the field?

Talkk.ai's success in gaining traction amid rising competitors can be attributed to our relentless focus on adding channels, user experience, continuous innovation in natural language processing, and a commitment to adaptability.

By staying agile and incorporating user feedback, we've created a platform that resonates with our audience, offering a seamless and effective communication experience.

Our emphasis on staying ahead in the rapidly evolving AI landscape has played a crucial role in differentiating Talkk.ai from competitors.

OIL & GAS INDUSTRY OPTIMIZATION IN MIDDLE EAST THROUGH AI

BY SWATHI

AI has become one of the most adaptive and accretive technologies and has been finding its way into almost every industry today. Leading oil and gas producers have also been majorly impacted by the reformation brought in by AI and have been constantly updating their resources as well as conducting research to bring in innovation to ease their daily work and boost profits.

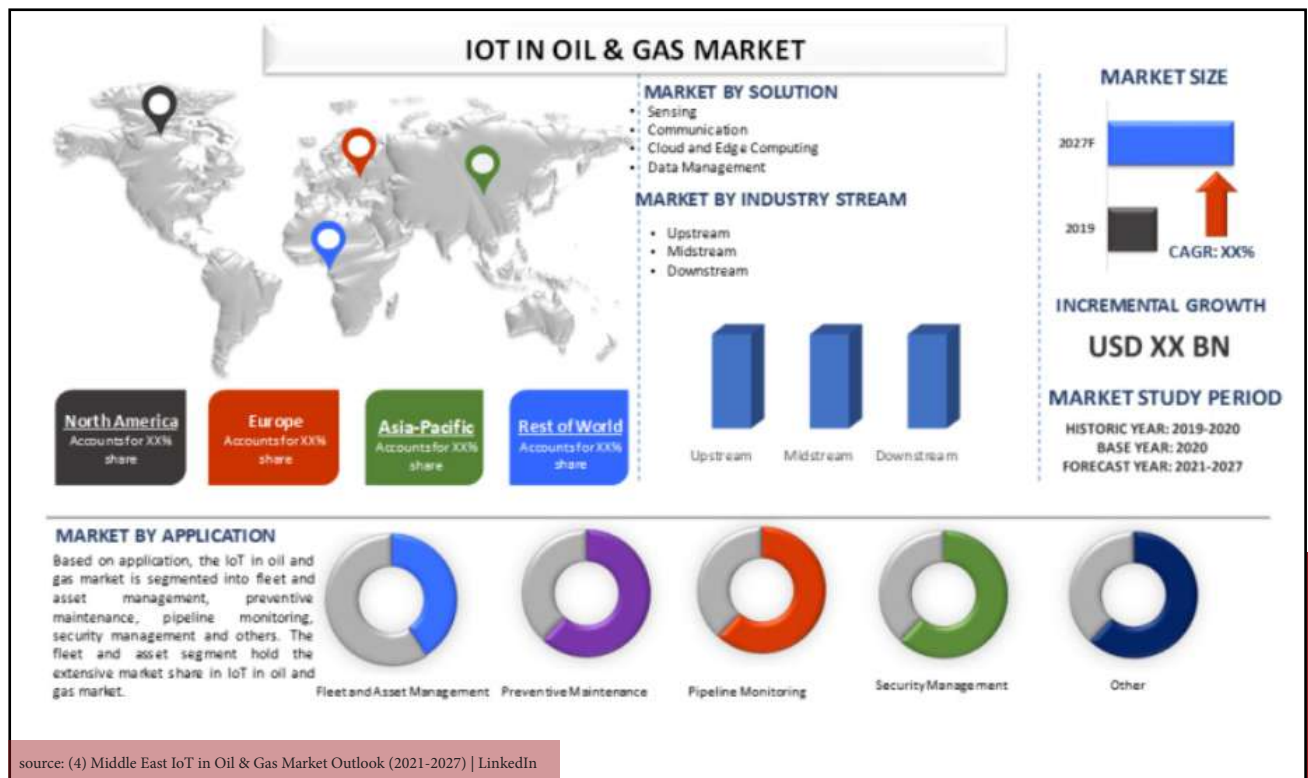
The Middle East has long been synonymous with the global oil and gas industry, possessing vast reserves and having a pivotal role in meeting the world's energy demands. The market size is estimated at \$2.38 billion in 2023 and is expected to reach \$4.21 billion by 2028, growing at a CAGR of 12.09 percent during the forecast period from 2023 to 2028.



According to the image displayed, AI is used extensively in American and Southeast Asian regions. The use of AI is comparatively less in the Middle East region, but still highly prevalent.

APPLICATION OF AI

AI has been revolutionizing oil and gas firms through tailored drilling plans and specific





reservoirs based on the needs of an arena, assessing risks of individual wells, and optimizing downstream operations for maximum speed at minimum cost.

The research paper titled 'Artificial Intelligence in Oil and Gas Upstream Trends: Challenges, and Scenarios for the Future' by Dmitry Koroteev and Zeljko Tekic suggested that the implementation of AI in the upstream sector can begin by mapping and extracting geographical information from logging techniques, ensuring accuracy and time efficiency.

CHALLENGES FACED BY OIL AND GAS SECTOR

A Chinese-based tech company Huawei faced issues in standardization, availability, simplifying AI model training and inference. These challenges are addressed through innovative AI solutions, focusing on data and application enablement.

Another challenge faced by the O&G industry is greenhouse gas emission (GHG), 10 percent of global GHG emissions is through scope 1 emission from operations and another 31 percent through indirect scope 2 and scope 3 emissions.

AI can help in identifying and measuring emissions as accurately as possible, determining the optimal means for abating them, executing the abatement, and then providing a full and accurate accounting of their decarbonization efforts.

AI can use historical maintenance and sensor data from equipment like pumps, compressors, and turbines to create predictive maintenance models. These models predict equipment failures in advance, minimizing downtime, cutting maintenance expenses, and optimizing technician resource usage.

AI INVENTIONS IN O&G

RoboWell, an AI-enabled autonomous controlled solution is the most recent innovation that is yet to be launched in the market. This new venture is with the collaboration of two Abu-Dhabi based firms, AIQ and Halliburton. This will be launched across ADNOC's North Bab asset in Abu Dhabi.

RoboWell is an AI-supported advanced process control (APC) solution for gas lifting wells, that can self-adjust to maximum production within specified operating conditions. The newly built system uses real-time data to react and optimize the production process.

CONCLUSION

In future, digital tech is expected to spread further in oil, gas, and other energy sectors. The combination of cloud, edge, and device technology will lead to smarter applications in these industries, boosting intelligence as well as pushing oil and gas exploration into a new era.

The oil and gas industry are looking at a new age of AI technology. The incorporation of new and innovative advancements has been well-received by different companies. Such innovation is most necessary to enhance efficiency, cost reduction, and improve environmental sustainability.

PENETRATION OF ROBOTICS IN HYDRO ENERGY SECTOR ACROSS ASIA-PACIFIC REGION

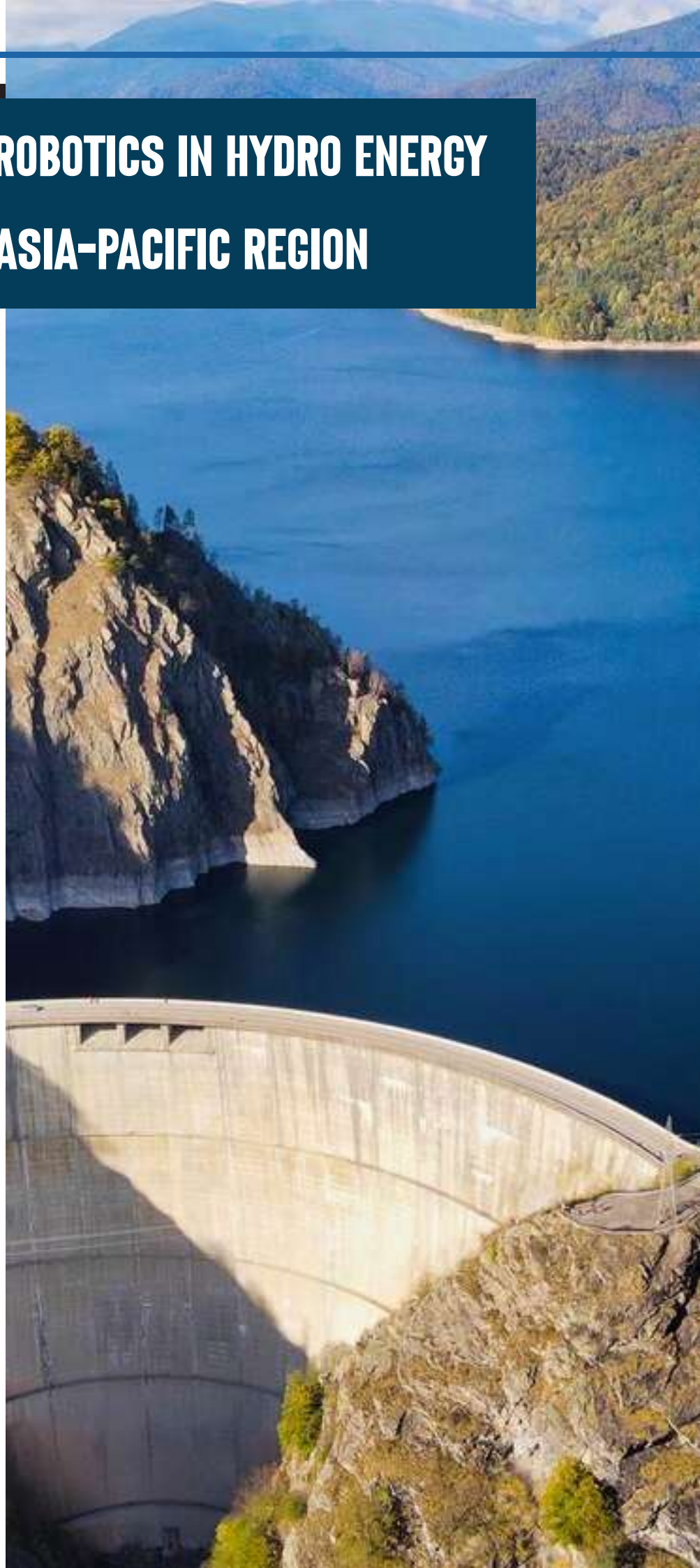
BY SWATHI

In this fast-paced world, robots are emerging to become an integral part of our lives. This machine marvel has already started to simplify our tasks, right from digital assistants such as Siri and Alexa to military drones used for surveillance.

Also, robots have been initiated to reform traditional sectors like agriculture with customized drones reducing labour in fertilizing the crops.

Rapid transformation in the energy sector calls for renewable energy sources to meet the growing electricity demand. Hydro energy has faced numerous challenges, including environmental concerns, higher costs, and inefficiencies, integration of AI-equipped robotics has emerged as a solution for the growing concern.

Asia-Pacific region is home to some of the most prominent hydropower sources, while the quest for innovating and developing renewable energy sources is more. According to a report by Statista (2021), China was the leading country with hydroelectricity generation with about 1300 terawatt hours, following Canada and Brazil.



Robotics holds the potential to enhance efficiency, reduce costs, and minimize environmental impact with advanced algorithms equipped with advanced sensing, monitoring, and maintenance capabilities can transform hydro energy sector.

Integration of advance robots in hydro power will perform tasks like, inspecting dams and turbines for cracks or wear, minimizing human exposure to hazardous environments and in turn reduce the cost without compromising the quality of work.

The use of robots and drones done to conduct inspections where humans cannot reach, or otherwise, in places which pose danger to humans. According to Enel Energy Power's study, the company has been testing robotic system to examine water pipelines from inside to get information on their condition.

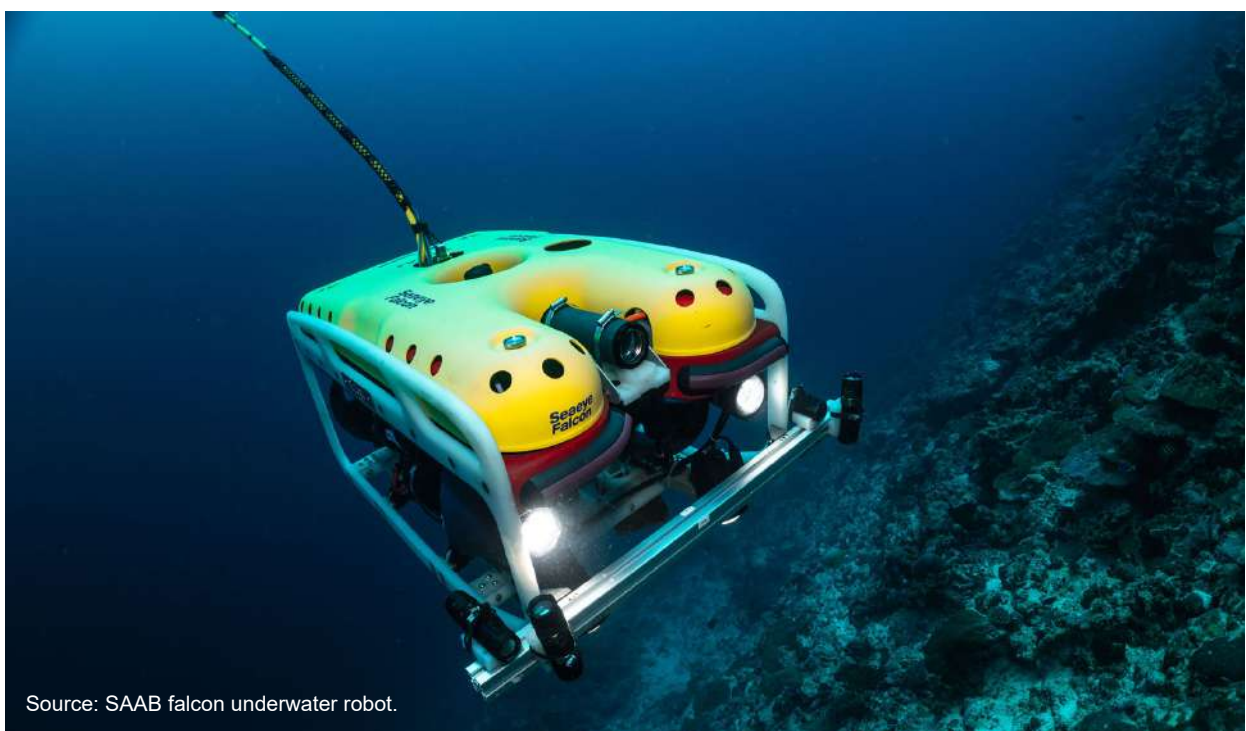
In 2020, China-based SPIC Wu Ling Electric Power innovated Hydropower Smart Remote O&M System, with its twenty-nine patented innovations and four proprietary software solutions. It is an optimized hydropower inspection robot and drones equipped with AI and smart solutions. This AI generative system is capable of recommending start up and shut down sequence and maintains the

machine based on the condition rather than scheduling. The system is based on cloud model facilitate to collect real time data and analyse the same. The Operators can now establish standards, specify routines, and guarantee thorough inspections, reducing reliance on personal assessments.

The firm with the Hydropower Smart Remote O&M System has saved maintenance cost by 10% , as well as increase the time availability and improve power generation by 0.5% and 0.3% respectively, reported International Hydropower Association.

Underwater e-robotics firm Saab Seaeye developed Falcon Underwater Vehicle, which is widely used for inspecting inlet pipelines. This is also used to navigate the complex structure, tight bends, and lengthy tunnels, providing detailed imaging and data collection for defect detection, corrosion assessment, and debris removal.

In conclusion, the integration of AI and machine learning robot in hydropower has the potential to revolutionize the energy sector across Asia Pacific region. Right from enhancing efficiency and reducing costs to ensuring environmental sustainability, advanced robots and drones are reshaping traditional practices on hydropower plant maintenance.



Source: SAAB falcon underwater robot.

HOW IS IOT SHAPING ENERGY SECTOR GLOBALLY?

BY ANNE FLORENTYNA

Internet of Things (IoT) is a new production reality in the list of technological advancements coming up today. The energy sector amid all the industries is transforming as companies begin to opt for green and sustainable solutions to address environmental challenges, reduce pollution, and combat climate change.

In the energy sector, IoT devices have been creating intelligent networks, mostly known as Smart Grids through collection, transmission and use of large quantities of data. This leads to integrate in an intelligent manner of all assets connected to the network, optimizing operation and increasing system flexibility.

IoT provides optimized power distribution, proficient utilization of renewable energy, and accurate energy consumption monitoring.

The global green energy market is seen to experience rapid growth due to a shift from non-renewable energy sources to more renewable alternatives.

According to a research by Nester, the market is likely to generate about \$250 billion in revenue by 2035, with a compound annual growth rate (CAGR) of about 9% from 2023 to 2035. In 2022 alone, based on the report, the market has generated about \$100 billion in revenue.

Software development firm Softeq said IoT technology modernizes energy sector by empowering maintenance forecast and asset management capabilities. These systems monitor asset performance and health through real-time data from embedded sensors within energy infrastructure, including wind turbines and solar farms.

If the IoT applications are wisely directed towards specific problems, the oil and gas companies can mark the start of a new industry with lower cost and higher efficiency, capable of facing these growing challenges.

In terms of shaping the energy system for the coming years, energy firms practicing traditional methods are taking measures to make their operations slant towards improving its efficiency and sustainability.

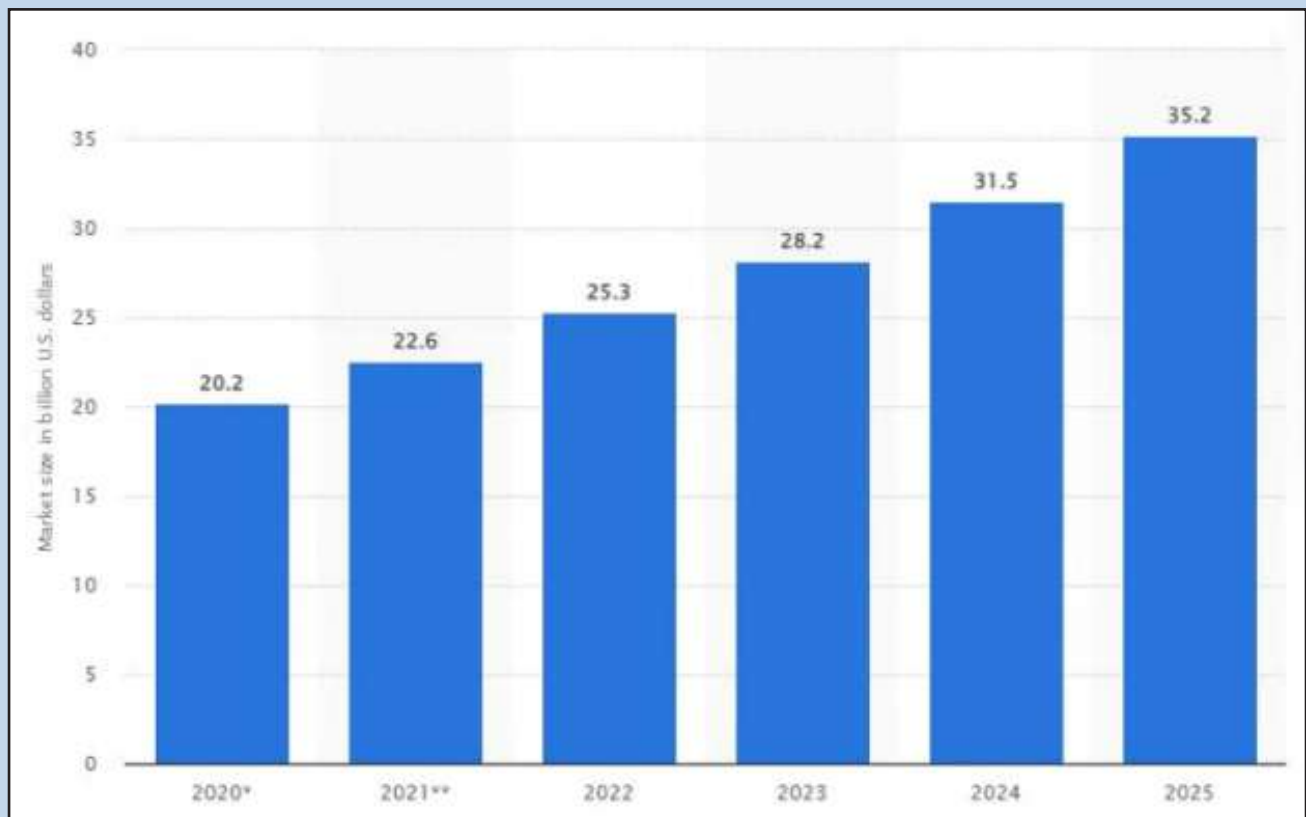
Privately owned Softeq said it collaborated with

Sky-Futures, a company specializing in drone-based industrial inspection services, to develop a workflow management system for oil rig inspections.

The company said its goal was to create a solution that processes images and videos captured by drones during inspections, making equipment monitoring more cost-effective for oil and gas firms.

Softeq said it developed a secure customer portal with a proprietary Machine Learning-powered back end. The company said this system is a versatile platform for automating order management, document handling, and digital asset organization.

This system of automation ultimately proved to save time and cut down expenses associated with oil and gas inspections.



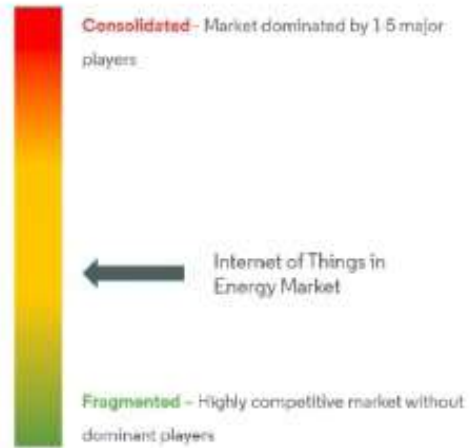
Source: Statista

Internet of Things in Energy Market Leaders

- 1 AGT International
- 2 Cisco Systems Inc.
- 3 IBM Corporation
- 4 Intel Corporation
- 5 SAP SE

*Disclaimer: Major Players sorted in no particular order

Market Concentration



Source: Mordor Intelligence



Yuliia Podorozhko, a market researcher on MadAppGang reported Internet of Things (IoT) is a fast-growing market today, valued at \$0.7 trillion in 2020 and is forecasted to reach \$4.5 trillion by 2030.

Podorozhko also said, that growing enterprise investment by businesses in IoT projects will boost the IoT energy market to a projected \$35 billion by 2025.

The North American region is known to have a strong foothold on IoT vendors, contributing to the market's growth. The most popularly known

labels are IBM, Microsoft, Intel, Cisco Systems, and Google.

The United States and Canada are known to be the early adopters of technologies such as Big Data, IoT, and mobility in most business sectors, paving the way to substantial growth opportunities for the IoT market.

These regions have well-developed and established economies, which highly empowers them to boost their investments in research and development activities.

Internet of Things (IoT) in Energy Market- Growth Rate by Region (2021-2027)



Source: Mordor Intelligence





Dr Sujal Bhavsar
Senior Data Scientist
Ascend Analytics

Dr Sujal Bhavsar is a Senior Data Scientist with a profound passion for harnessing the capabilities of Machine Learning (ML) and Artificial Intelligence (AI) in the realm of power systems. His research endeavors seek to bridge the gap between advanced data analytics and the intricacies of power systems, striving for innovations that can drive efficiency, sustainability, and economic viability in the energy sector. He welcomes collaborations, discussions, and knowledge exchanges with fellow researchers and professionals who share a similar vision for the future of power systems augmented by AI.



NAVIGATING A GREENER TOMORROW:

AI'S REVOLUTIONARY ROLE IN ENERGY

Imagine a world where our energy - the lifeline of modern civilization - is both endlessly sustainable and efficiently managed. This vision is becoming a reality as Artificial Intelligence (AI) makes groundbreaking strides in the energy sector. From optimizing renewable energy to revolutionizing how we consume power, AI is at the forefront of an energy revolution.

AI: The Power behind Renewable Energy

Renewables like solar and wind are key to a sustainable future, but their unpredictability

has been a challenge. AI changes the game. By analyzing vast amounts of weather data, AI algorithms can predict power generation, ensuring a steady integration of these sources into our power grids. This not only boosts efficiency but also stabilizes energy supply.

Smart Grids and Smarter Consumption

AI's magic extends to how energy is distributed and used. Smart grids, powered by AI, are revolutionizing energy management. These grids balance supply and demand, reduce wastage, and



seamlessly integrate renewable sources. On the consumer side, AI-driven smart home systems are personalizing energy efficiency. These systems learn from your habits to optimize heating, lighting, and appliance use, cutting costs and carbon footprints.

The Future of Energy Storage and Electric Vehicles

As we embrace renewables, efficient energy storage becomes crucial. AI is enhancing battery technology, improving charge cycles, and longevity. This advancement is pivotal for both home energy storage and the broader adoption of electric vehicles (EVs).


Speaking of EVs, AI is integral in managing their rise. From optimizing charging demands to integrating EVs into the energy grid, AI is making electric transportation more viable.

Challenges Ahead

Despite its promise, integrating AI into energy comes with challenges. Data security and privacy are major concerns. Moreover, significant investment in infrastructure and training is needed to fully realize AI's potential in this sector.

Conclusion

AI's role in transforming the energy sector is not just an enhancement; it's a revolution. By boosting renewable energy, optimizing consumption, and paving the way for sustainable transportation, AI is a key player in our journey towards a sustainable future. As we embrace this technology, addressing its challenges head-on, we're not just adopting new methods; we're shaping a greener, more efficient world.

A professional portrait of Roberto d'Ambrosio, a middle-aged man with a grey beard and glasses, wearing a dark suit jacket over a striped shirt. He is looking directly at the camera against a dark background.

*Roberto d'Ambrosio
Executive Director and CEO
Axiory Global*

Roberto d'Ambrosio, Executive Director and CEO, Axiory Global Holding, a BA in Law (IT), and MBA (Henley) a post Grad with the ICA-University of Manchester (GRC). He is currently finalizing an MSC in Financial Crime and Compliance in Digital Societies with the University of Manchester. Roberto has extensive experience in the financial industry and he is a recognized contributor to several media in the UAE and GCC, general economic topics, with a focus on finance, and new technologies.

He is an expert in Governance, Risk Management and Compliance, and an investment mentor, having held a number of seminars worldwide on algorithmic trading and behavioural psychology applied to finance.

AI'S IMPACT ON EV SECTOR, ALSO HOW SHIFT TO EV SAVES FUEL

The impact of the Artificial Intelligence (AI) and its latest development is evident and transforming the Electric Vehicle (EV) sector in unprecedented ways, reshaping the future of transportation and environmental sustainability.

AI is instrumental in optimizing the efficiency of EVs. Machine learning algorithms analyse data from various sensors and vehicle systems in real-time, continuously and proactively learning, allowing EVs to adapt more and more efficiently to driving conditions. This results in improved energy management, longer battery life, and reduced energy consumption, making EVs more practical and cost-effective for consumers.

When it comes to batteries, predictive analytics enable early detection of potential issues thus increasing battery health and performance. This data-driven approach ensures that batteries operate optimally and reduces the need for costly replacements, making EV ownership more sustainable, addressing one of the critical points of a full shift to EV.

One of the most evident (and debated) impact of AI is its deployment in autonomous driving technology. Self-driving features already rely heavily on AI-driven sensors, cameras, and machine learning algorithms. These capabilities not only improve safety but also make electric vehicles more convenient and accessible to a wider range of users. Linked to this aspect, we have the impact of AI in personalizing the EV driving experience. AI-powered voice assistants, infotainment systems, and predictive maintenance alerts cater to the preferences and needs of individual drivers, enhancing the overall ownership experience.

Of course, for both of these aspects there are risks associated with AI becoming critical in processes deeply linked to safety, which will need to be properly identified and mitigated.

AI is also being used to optimize EV charging infrastructure. Smart charging stations use predictive analytics to forecast demand, allowing for efficient energy distribution and reduced grid stress during peak periods. Moreover, AI-driven apps help users find available charging stations, making EVs more practical for daily use.

Looking at the industrial side, AI-driven automation is revolutionizing EV manufacturing. Robotics and machine learning are streamlining production lines, ensuring consistent quality, and reducing waste. This results in lower manufacturing costs, freeing capital for further research in innovation and making the EV sector more palatable to investors given the increased financial return potential.

AI is indeed a driving force behind the evolution of the EV sector. Its impact extends from enhancing vehicle efficiency and battery management to autonomous driving and charging infrastructure optimization.

“ONE OF THE ASPECT AI CRITICALLY HELPS IN ADDRESSING IS THE FIERCELY DEBATED TOPIC OF THE REAL IMPACT OF EV ON FUEL CONSUMPTION. LET'S ELABORATE A BIT MORE ON THIS TOPIC AS IT IS CRUCIAL TO THE TRANSITION TO EV.”

The transition to Electric Vehicles has sparked both enthusiasm and criticism. One common argument against EVs is that they merely shift the pollution problem from tailpipe emissions to the energy production phase, especially in regions where fossil fuels dominate the electricity grid. However, a closer look reveals that EVs indeed save fuel and are a crucial step towards a greener future.

First of all, EVs are inherently more energy-efficient than their internal combustion engine counterparts. Traditional gasoline-powered vehicles convert only about 20-30% of the energy from fuel into movement, while EVs convert approximately 85-90% of the electrical energy from the grid to power at the wheels.

Looking at energy production, the argument criticising the shift to EV postulates that all electricity used by EVs comes from fossil fuels. While there is still a long way to go, truth is the energy mix is evolving rapidly. Governments worldwide are increasingly investing in renewable energy sources like wind, solar, and hydroelectric power. As the share of renewables in the energy mix grows, the carbon footprint of charging EVs diminishes, making them cleaner over time.

Many regions are actively working towards grid decarbonization by phasing out coal and natural gas power plants and replacing them with cleaner alternatives. This transition directly impacts the “environmental cost” of EV charging. As the grid becomes greener, the energy used for EVs becomes increasingly clean, further reducing their carbon footprint.

Furthermore, recent EVs now employ regenerative braking systems, which convert kinetic energy back into electricity when the brakes are applied. This technology improves overall energy efficiency and reduces the need for frequent charging, ultimately saving more fuel.

In conclusion, the transition to Electric Vehicles is not merely moving pollution from tailpipes to power plants. EVs are inherently more energy-efficient, and their environmental impact depends on the source of electricity, which is progressively becoming cleaner. The global push for renewable energy, grid decarbonization, and technological advancements in battery technology, aided by the data analysis capabilities provided by advanced AI, all contribute to making EVs a genuine solution to save fuel and reduce greenhouse gas emissions.



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NUCLEAR ENERGY TRENDS IN 2023

BY SWATHI

With the ever-evolving trends in clean energy receiving attention today, nuclear power emerges from the shadows of controversy into the spotlight of innovation. The use of nuclear energy is evolving and transforming, not limited to electricity generation but prevalent in sectors like space exploration and radioisotopes too.

According to a report from the World Nuclear Association as of November 2023, 440 nuclear reactors are operating across 32 countries as well as in Taiwan, with a combined capacity of about 390 gigawatts electric (GWe).

The reshaping of nuclear energy was evident when numerous countries embraced the innovation of small modular reactors (SMR) at the International Atomic Energy Agency's (IAEA) scientific forum in Vienna, Austria.

What makes SMR an innovation is, that it is compact and can power up to 300 megawatts (e) per unit, which is about one-third of the generating capacity of traditional nuclear power reactors.

While looking at progress in nuclear reactors, the contribution of nuclear in the health sector is also notable. Radiopharmaceuticals are a budding subject used as diagnostic and therapeutic agents. These are frequently employed in cancer and cardiovascular disease treatment.

Lawrence Livermore National Laboratory (LLNL) accomplished a significant fusion breakthrough, in December 2022. The team used lasers to create the star-like conditions of fusion ignition in a laboratory.

The ignition resulted in a net energy gain for the first time, i.e., the fusion reaction produced more energy than it consumed, a net gain of 1.5 megajoules. This breakthrough brought a step closer to harnessing nuclear fusion.

Governments, research institutions, and private companies have begun to form partnerships to accelerate the development and deployment of new technologies. This collaborative approach fosters a conducive environment for research, development, and the scaling up of nuclear projects.

As late 2023 unfolds, nuclear energy is not just a relic of the past but a dynamic and forward-looking force in the global energy landscape. Advanced technologies, sustainable practices, and collaborative efforts are propelling nuclear power into a new era, promising cleaner, safer, and more efficient energy solutions for the future.

The trends outlined here indicate a promising trajectory for nuclear energy as it continues to play a pivotal role in the global transition to a more sustainable and diverse energy mix.





GLOBAL CONFLICTS LEAD TO SUPPLY CHAIN DISRUPTION IN ENERGY

BY ANNE FLORENTYNA

The global supply chain is known to be under threat, marking various sectors including energy, pharmaceuticals, technology, agriculture, logistics, and commodities. In terms of energy resources like oil and natural gas, they are sourced from limited geographic locations such as the Middle East region.

Lately, the growing conflicts between a few nations in the Middle East region have resulted in a blockage of transportation as well as the destruction of major energy resources. Thereby, the price of these resources and logistics has risen to bring an imbalance in the global economy.

Oil prices surged 4% on October 9, after the break of military conflict between Israel and the Palestinian Islamist group Hamas leading to the initial fears of a hit in oil supply from the Middle East and leapt nearly 6% by the end of the same week, based on Reuters News report.

According to Observer Research Foundation, 31 percent of global oil production, 18 percent of gas production, 48 percent of proved oil reserves, and 40 percent of proved gas reserves are from the Middle East.

Ben Cahill from Energy Security and Climate Change Program stated,

IT IS DIFFICULT TO TELL HOW EVENTS WILL UNFOLD IN THE MONTHS TO COME, BUT THE CONFLICT COULD EASILY SPREAD TO NEIGHBOURING STATES, ESPECIALLY LEBANON AND IRAN.

Inflation is perceived to be over four decades high since 2022, and it can be foreseen to rise further with the break out of the new conflict in the Middle East region, leading to a possible economic recession spread across continents in the coming years.

Economists are now closely studying about crisis in the

Middle East trajectory with comparison to the conflicts recorded in history from the region, to forecast the prospective scale of economic repercussions.

According to the World Bank's quarterly Commodity Markets Outlook report, if the conflict between Israel and the militant group from Palestine intensifies, the global economy will be up against a massive energy shock for the first time in decades.

Amid all this, Artificial Intelligence promises to transform supply chain management in demand forecasting and planning, the need of the hour. AI algorithms and location technology tools can analyze vast amounts of historical data and market trends to provide a more accurate outlook of current and future demand.

The technology-based alternatives such as AI, it is anticipated to complement some damages in the global supply chain and optimize various lines of business in times of crisis.

DEPLETION OF FOSSIL FUELS – WHAT DOES AI HAVE TO OFFER?

BY SWATHI

In an era marked by growing concerns over climate change and the rapid depletion of fossil fuels, the world is turning its gaze towards innovative solutions. Artificial Intelligence (AI), once confined to the realms of technology and data, is now emerging as a pivotal player in the global pursuit of sustainable energy alternatives.

Traditional fossil fuel has been holding the power to our existence for so long, that the reservoirs have been dwindling, and environmental consequences escalate at current times. So it is a need of the hour for more clean and efficient green energy sources.

Private banks have also increased lending for fossil fuels, reaching \$572 billion and a large chunk of countries are still subsidizing it, stated Jenny Lei Ravelo, senior reporter at Devex.

One of the major contributions of AI in saving fossil fuels is its ability to analyze large data and bring precise predictions. The advanced algorithm can predict peak demand periods and ensure efficient allocation of energy resources.

AI can balance energy according to its demand and supply while adjusting the energy usage at the peak period which will

lead to the reduction of energy wastage and cost savings.

In a wider scenario, penetration of electric vehicles could reduce emissions by 8.4 million tons of carbon dioxide in 2030 and 49.5 million tons of CO₂ in 2050, based on a paper published at the IOP Conference Series Earth and Environmental Science in 2021.

Climate Conference COP 28 (Conference of the Parties) is conducted from November 30 to December 12 in Dubai with the agenda to tackle the cause of climate change by stressing their focus on the limitation of fossil fuels exploited in the coming years.

As the world deals with the depletion of fossil fuels, AI emerges to carry hope, offering transformative solutions across the energy landscape. From optimizing renewable energy production to revolutionizing transportation and accelerating innovation, artificial intelligence is proving to be a powerful ally in the quest for a sustainable and cleaner future.

As technology continues to advance, the synergy between AI and energy solutions will undoubtedly play a pivotal role in shaping a more sustainable and resilient world.



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