ANGVA2U Info *07/2023. 25th July 2023 (for ANGVA members only)*

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1.0 Selected News / Articles

1.1 Egypt

Presidential initiative to replace obsolete vehicles: Egypt

25th July 2023. Staff Writer, Daily News Egypt

Minister of Finance Mohamed Maait said that the state's general treasury bore EGP 675m as the value of the green incentive for 27,225 new natural gas-powered vehicles

People are seen at a market amidst traffic jam in downtown Cairo March 11, 2013. REUTERS/Amr Abdallah Dalsh
Reuters Images

Minister of Finance Mohamed Maait said that the state's general treasury bore EGP 675m as the value of the green incentive for 27,225 new natural gas-powered vehicles. Citizens can request to have their old vehicles replaced and scrapped according to environmental requirements, as part of the presidential initiative to eliminate obsolete vehicles.

Maait said on Monday that the government is proceeding with the gradual expansion of that initiative in all of Egypt's governorates, according to the availability of the required infrastructure for cars that run on natural gas. This initiative is another step to enhance green transformation efforts. The Egyptian government called on the business community and manufacturers to present their smart products and solutions to help with the process of developing vehicle manufacturing technology.

In coordination with the Federation of Egyptian Industries, invitations were sent out to members of the Automotive Division of the General Federation of Chambers of Commerce; to participate in the development of the environmentally friendly automobile industry, its components and the necessary infrastructure for its operation. Proposals and offers can be received via email.

The Minister pointed out that the initiative began receiving requests from citizens in Ismailia wishing to replace their obsolete cars, which were manufactured over 20 years ago, with new ones that run on natural gas. This aims to help facilitate the process of helping citizens own new models of environmentally friendly cars at competitive prices. This all comes within the framework of the state's efforts to reduce air pollution and harmful carbon emissions.

Khaled Nofal, First Assistant Minister of Finance and Chairperson of the Vehicle Replacement Fund at the Ministry, said that the initiative allows the business community and car manufacturers to send their proposals in preparation for joint work with them.

He added that, in order to ensure the actual implementation of the replacement initiative, the citizens of Sharqyea and Beni Suef governorates, who applied to replace their obsolete cars, will soon have their vehicles scrapped. in the main yard of the Greater Cairo Governorate in Abu Rawash area, to speed up the procedures for citizens to receive their new cars.

Source: *https://www.zawya.com/en/economy/north-africa/presidential-initiative-to-replace-obsolete-vehicles-egypt-i8owpeo3*

1.2 Nigeria

Fuel price hike: NEC okays massive rollout of CNG, electric vehicles

20th July 2023. By Ochogwu Sunday

The National Economic Council (NEC) has endorsed the proposed mass deployment of Compressed Natural Gas (CNG) vehicles to all states for public transportation.

According to NAN, the Director of Information, Office of the Vice President, Mr Olusola Abiola, made the statement on Thursday in Abuja.

According to Abiola, the decision is part of the resolutions at the NEC meeting chaired by Vice President Kashim Shettima.

Shettima said the federal government will vigorously pursue the mass deployment of CNG and electric vehicles nationwide.

"We will also vigorously pursue the mass deployment of CNG-powered vehicles and establishment of autogas conversion plants/kits in all states in the short-term.

"We will also deploy electric buses and cars with charging infrastructure across the country."
Source: *https://dailypost.ng/2023/07/20/fuel-price-hike-nec-okays-massive-rollout-of-cng-electric-vehicles/*

1.3 Tanzania

TPDC outlines plan to boost natural gas use

22nd July 2023. Daily News Reporter

THE Tanzania Petroleum Development Corporation (TPDC) has laid out a number of strategies to increase natural gas use in vehicles and cooking in the country.

One of the strategies is the submission of an application to the government for tax exemption for natural gas car and truck conversion kits. TPDC Director General Mussa Makame revealed this in Dar es Salaam on Friday during a meeting with media editors.

So far, 1,511 families and seven institutions in Dar es Salaam, Coast, Lindi, and Mtwara Regions have been connected to natural gas for cooking and transportation, according to him.

He asserted that they sent suggestions through the Ministry of Finance to lower the cost of the conversion equipment.

The TPDC boss added that there are plans to enhance the number of natural gas filling stations for automobiles, including separating Dar es Salaam into four zones with stations in each.

According to Mr Makame, 20 firms have received permits for the construction of stations, including the Egyptian company Taqa Arabia, which plans to erect 12 stations, and the Puma Company,which plans to erect natural gas infrastructure in its stations.

"Two stations, which are being constructed by Taqa Arabia and Dalbit Petroleum around the Airport and Sinza area opposite Sam Nujoma Road, will be ready before the end of this year," said Mr Makame. These stations, he explained, will have workshops for converting vehicles to Compressed Natural Gas (CNG) systems.

Within the set timeframe of two years, TPDC also intends to build a CNG mother station at Mlimani City that will enable large vehicles to pick up the gas from the station and distribute it to various regions where infrastructure has not yet been reached.

Mr Makame added that the centre will be able to serve six vehicles by filling in natural gas at once, including enabling six trucks to pick up gas from the station and distribute it to other areas.

According to Mr Makame, TPDC is collaborating with Rural Energy Agency (REA) to connect 529 houses at a cost of 3.82bn at Mnazi Mmoja area in Lindi Region and another 451 houses in Mkuranga District at a cost of 2.99bn/-.

He said the government, through TPDC is continuing with the construction of a 12.4- km long natural gas supply pipeline from Mwenge to Mbezi Beach via Bagamoyo Road at a cost of 3.29bn/- whose implementation has reached 75 per cent. Two factories and five hotels are expected to be connected as first customers.

In terms of natural gas production, she said it has increased to 68.02 billion cubic feet compared to 59.96 billion cubic feet produced during the same period in 2021/22, equivalent to an increase of 13 percent.

Last month, Works and Transport Minister Prof Makame Mbarawa said the government was considering giving subsidies for Compressed Natural Gas (CNG) vehicles to encourage the use of the source of energy.

"The government is considering the possibility of introducing a subsidy programme to attract more people to convert their cars to CNG," he noted.
Source: https://dailynews.co.tz/tpdc-outlines-plan-to-boost-natural-gas-use/

1.4 Bangladesh

Gas crisis hits all users hard

13th July 2023. By M AZIZUR RAHMAN

'Industrial output drops to 50-70pc'

Natural gas crisis is now affecting all sorts of consumers, including industries, power plants, and commercial and household users, resulting in cut in industrial output and untold sufferings of the commoners.

Although the government increased gas tariff by up to 178.88 per cent for industries assuring them of 'uninterrupted' gas supply, they are now in a fix due to the crisis, it has been alleged.

"We are not getting sufficient natural gas, which is badly hampering industrial output," Executive President of Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA) Mohammad Hatem told the FE on Wednesday.

It seems that the government is enforcing area-based gas rationing without informing the consumers, he noted.

If natural gas is found in some areas in the morning, they are not getting it in the evening. Similarly, if the industries get gas in the evening, they are not getting it in the morning, Mr Hatem alleged.

Industrial output dropped to 50-70 per cent as the consequences.

"We are now shocked. It seems that there is nobody to look after the problem."

Industrial consumers agreed to pay higher prices, hoping to get 'uninterrupted' supply, but it is now a 'far cry,' he added.

The compressed natural gas (CNG) filling stations are getting lower than expected gas pressure, which is hampering CNG filling in vehicles, General Secretary of Bangladesh CNG Filling Station and Conversion Workshop Owners Association Farhan Noor told the FE.

"Natural gas pressure requirement in the CNG filling stations is around 15 per square inch (psi). But the stations near some industrial areas often get around 4-5 psi, and in other areas it turns to almost zero psi," he alleged.

The power plants are also not getting required gas to generate electricity.

Some one and a half dozen gas-fired power plants are now shut, as the state-run Petrobangla could supply around 1,140 million cubic feet per day (mmcfd) of natural gas to the plants against their 2,174 mmcfd demand.

Residents of different areas in the city are facing acute gas crisis and failing to cook food using the fuel, although they are paying gas bills to the government, it has been alleged.

Commoners of Mirpur, Gabtoli, Savar, Bashabo, Khilgaon and Paltan areas are the worst affected.

When contacted, Managing Director of Titas Gas Transmission and Distribution Company Ltd (TGTDCL) Md Haronur Rashid Mullah said the present gas crisis is due to short supply of gas against demand.

"We are getting around 1,700 mmcfd of gas against our demand of around 2,200 mmcfd," he justified.

The country's natural gas output is currently hovering around 2,768 mmcfd, of which 581 mmcfd is regasified imported LNG, according to Petrobangla statistics as on July 11.

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Source: *https://today.thefinancialexpress.com.bd/last-page/gas-crisis-hits-all-users-hard-1689184199*

1.5 India

Jio-BP, Adani Total Gas Plan To Set Up Biogas Plants

7th July 2023. By BW Online Bureau

Initially, they have planned to construct five plants, and the remaining five will be established based on the availability of feedstock, which is an important consideration

Photo Credit : jio_bp_mobility_station

Mukesh Ambani's Reliance (RIL) and Gautam Adani-led Adani Total Gas (ATGL) are preparing to establish ten compressed biogas (CBG) plants each nationwide, according to officials of both these companies.

These plants will have a maximum capacity of 30 tonnes per year. Initially, five plants will be set up within the next five years, followed by the remaining five. The companies plan to invest up to Rs 2500 crore each in constructing these plants.

CBG is an environmentally friendly fuel derived from waste and biomass sources, sharing similar properties with Compressed Natural Gas (CNG) and suitable for automotive, industrial, and commercial applications.

According to a senior official, the installation sites for these plants have been identified by RIL and Adani Group. Initially, they have planned to construct five plants, and the remaining five will be established based on the availability of feedstock, which is an important consideration.

Each plant will have a feedstock processing capacity of 250-500 tonnes per day, with CBG production ranging from 10 to 20 tonnes per day (TPD). The estimated investment for the Uttar Pradesh unit is approximately Rs 750 crore.

Jio-BP, a fuel retail joint venture between Reliance Industries and British oil major BP, has already commenced the retailing of compressed biogas (CBG) and bio-CNG (B-CNG), both of which can be used as substitutes for compressed natural gas in CNG-powered vehicles. As per the information, five of RIL's CBG plants will be located in Gujarat, while the remaining five will be spread across the country.

Presently, India has nearly 30 operational CBG plants, and industry experts predict that the sector will attract investments of over USD 2 billion within the next five to seven years. Under the Satat scheme, the government has announced an ambitious plan to reach a capacity of 15 million metric tonnes per year, equivalent to approximately 40,000 tonnes per day.
Source: *https://www.businessworld.in/article/Jio-BP-Adani-Total-Gas-Plan-To-Set-Up-Biogas-Plants/07-07-2023-483313/*

1.6 Germany

Biomethane fuel offers negative carbon footprint

17th July 2023. By tg

© Jackmac34/pixabay.com

Although the EU Commission wants to abolish the internal combustion engine in individual transport through eMobility, biofuels are far from dead, according to a new study.

German scientists at the University of Hohenheim have reported that fuels made from agricultural residues can even have a negative CO2 impact on bus and truck journeys.According to the study, biomethane offers a promising and cost-effective alternative to e-mobility, especially in heavy goods transport or for construction and agricultural machinery. "Here, the increased use of biomethane as bio-CNG or bio-LNG (liquefied biomethane) can be an important factor and can lead to a significant reduction in CO2 emissions", says study leader Andreas Lemmer from the State Institute for Agricultural Engineering and Bioenergy.

Within the probioLNG project, he and colleagues found that regeneratively produced bio-LNG reduced CO2 emissions by more than 65% on average. "If we only used liquid manure, the CO2 balance was even negative," Lemmer adds. Nitrogen emissions also decreased by 60% with bio-LNG fuelling compared to a Euro VI diesel bus, and particulate matter pollution by as much as 90%.

In a two-stage pressure fermentation established at the Karlsruhe Institute of Technology, it was possible to

and to produce biogas with a methane content of over 90% by volume. The use of the fuel is currently being investigated in the joint project "NEOBus". In addition to a negative CO2 footprint, BIO-LNG offers a good additional source of income for farmers.
Source: *https://european-biotechnology.com/up-to-date/latest-news/news/biomethane-fuel-offers-negative-carbon-footprint.html*

1.7 United States of America

Renewable natural gas and hydrogen: fuels of the future for transportation decarbonisation

24th July 2023. Author Hope Raymond Santiago Canel Soria

As a mounting number of companies commit to various decarbonization solutions, renewable natural gas could play an increasingly important role in the transportation sector – both as an outright replacement for diesel and gasoline and as the feedstock for bioproducts used in high-emissions, difficult to abate sectors.

Use as a feedstock in the development of bioproducts such as biohydrogen represents an emerging source of demand for RNG. Bioproducts will play a critical role in enabling the transportation industries' transition to a low-carbon future, yet challenges such as high costs, limited supply and regulatory uncertainty must be addressed for widespread adoption.

Renewable natural gas in the transport sector

Renewable natural gas – also referred to as biomethane – is biogas that is captured from decomposing organic waste from landfills, wastewater treatment facilities and livestock manure. RNG is considered a "drop-in" fuel, meaning it can be used interchangeably with fossil gas in a conventional natural gas transmission system when upgraded to pipeline specifications.

Currently in the US, the majority of RNG goes into the transport fuels sector where it is compressed or liquified and used to fuel natural gas vehicles. The concentration of RNG use in this sector has been driven by state and federal incentive programs, namely the California Low Carbon Fuel Standard and the US EPA's Renewable Fuel Standard.

RNG accounted for around 69% of on-road fuel used in natural gas vehicles in the US in 2022, according to a joint report from Natural Gas Vehicles for America and the Coalition for Renewable Natural Gas released in April.

RNG is often touted as a "fuel of the future" due to its low-to-negative carbon intensity and its interchangeability with fossil natural gas. For example, the average annual carbon intensity of bio-CNG under the California Low Carbon Fuel Standard in 2022 was -92.26 gCO2e/MJ. In comparison, the average carbon intensity of fossil CNG under the most recent LCFS current pathway data from the California Air Resources Board was 82.84 gCO2e/MJ.

RNG production capacity in 2022 saw a 218% increase over 2018 levels, with over 280 facilities currently under operation and nearly 500 more under construction or in development, according to the report.

Although production capacity is ramping up, RNG production is still only a small fraction of total US natural gas production, and the cost of RNG far exceeds that of conventional natural gas. Platts, a part of S&P Global Commodity Insights, assessed the value of the North America Renewable Natural Gas Premiums (California and Excl. California) at $30.45/MMBtu and $27.70/MMBtu, respectively, on July 18. In comparison, spot physical Henry Hub has averaged $2.41/MMBtu year to date on July 18, according to data from S&P Global Commodity Insights.

Moreover, there are questions about regulatory uncertainty surrounding RNG that could influence production levels and prices, including whether more states would implement Clean Fuel Standards and if Public Utility Commissions would grant approval on rate cases, the regulatory process that sets the rates a utility is allowed to charge customers, for the use of RNG by utilities.

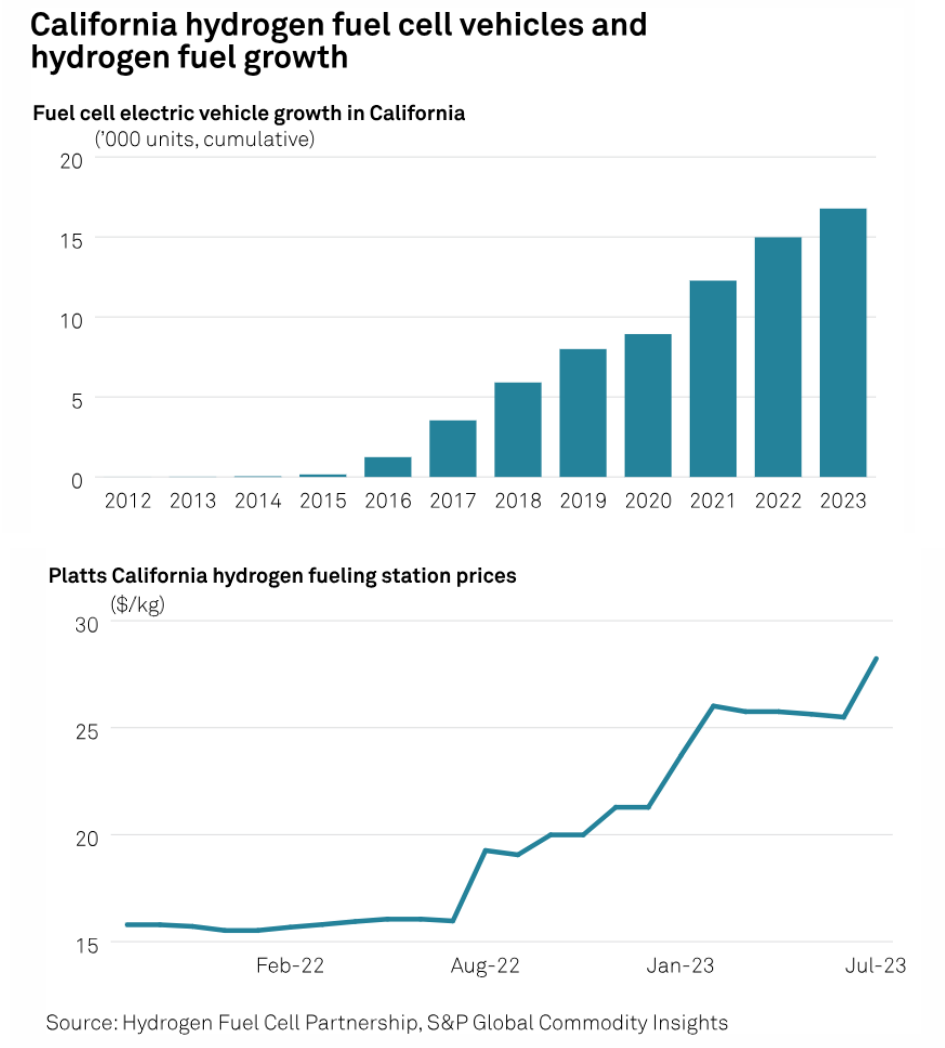
Bioproducts for transport and shipping

Bioproducts, such as biohydrogen, are rising as innovative means to decarbonize the transportation and shipping sectors with these industries beginning to invest in and commit to sourcing "greener" fuels and feedstocks.

Biohydrogen is hydrogen produced through either the conventional production method of steam methane reforming or autothermal reforming with RNG or biogas from biomass as its feedstock rather than conventional natural gas.

Hydrogen is currently used as an alternative transport fuel in hydrogen fuel cell vehicles in the US, primarily seeing growth in California. This application of hydrogen has garnered popularity recently due to the fact that it only produces water when consumed in a fuel cell. In comparison with conventional gasoline vehicles, the use of hydrogen can reduce CO2 emissions by up to 90% depending on how the hydrogen is produced, according to the US Department of Energy.

Platts last assessed hydrogen prices at California fueling stations on July 5 at $28.23/kg, the highest value since the assessment's launch in September 2021.



Incentives for hydrogen production

A key incentive in the Inflation Reduction Act of 2022 targeted the scaling up of production of low-carbon hydrogen by making available a hefty hydrogen tax credit: the 45v clean hydrogen production tax credit.

The clean hydrogen tax credit amount is determined by the lifecycle greenhouse gases emitted during hydrogen production, with the potential to receive up to $3/kg of hydrogen if the lifecycle emissions are below 0.45 kg CO2e as well as following certain prevailing wage and apprenticeship requirements.

Market players have begun to consider various approaches to reducing their emissions enough to qualify for these tax savings. One approach, the use of RNG as a partial or total replacement feedstock, has been floated by the market as a potential way to lower lifecycle emissions due to its low-to-negative carbon intensity.

The feedstock of the RNG or biogas must be considered as carbon intensities can range significantly.

"One needs to be very careful about the feedstock used. Our analysis shows that the carbon intensity looks totally different depending on whether one is using woody biomass or waste

biomass," said Anne-Sophie Corbeau, global research scholar at the Center on Global Energy Policy at Columbia University.

As a result, the exact blend rate of RNG and natural gas that would qualify for the 45v tax credit would depend on the carbon intensity of the RNG used.

The use of RNG for biohydrogen production in the US is still a gray area under the statute of the 45v tax credit, but it is currently recognized under the US Department of Energy's National Clean Hydrogen Strategy and Roadmap, which was released in June.

Regulatory uncertainty

A remaining uncertainty about the regulatory implementation of the 45v tax credit is the approval of book-and-claim accounting for RNG, said Gabriel Olson, director of carbon strategy and policy at BayoTech, a leading producer of biohydrogen. Book-and-claim is a commonly used accounting mechanism where the end user can claim the carbon reductions of the RNG without receiving the physical molecules as long as it is injected into the interstate pipeline system.

"If this [book and claim] were to not be available, or if it's extremely restricted to specific gas distribution localities like in a particular state or county, it would fragment the market, reducing flexibility, and thus make it expensive and challenging to contract for a reliable source," Olson added.

Whether book-and-claim accounting is permitted will determine the practicality of using RNG as a feedstock to reduce emissions during the production of biohydrogen in an effort to qualify for the clean hydrogen tax credit.

Ultimately, the details of the regulatory implementation of the clean hydrogen tax credit will determine whether biohydrogen production makes sense economically, according to Alex Klaessig, S&P Global Commodity Insights senior director of the Hydrogen and Renewable Gas Forum.

"If the chips fall correctly regarding carbon accounting, the H2 PTC could make biohydrogen a bonanza," Klaessig said.
Source: *https://www.spglobal.com/commodityinsights/en/market-insights/blogs/energy-transition/072423-renewable-natural-gas-and-hydrogen-fuels-of-the-future-for-transportation-decarbonization*

1.8 Malaysia

Hydrogen-powered tram delivered to Kuching City

19th July 2023. By BW Online Bureau

The first batch of hydrogen-powered smart trains, manufactured by CRRC Zhuzhou Electric Locomotive Research Institute Company Limited, have been delivered to Kuching City, Malaysia. The trains are part of the rolling stock for the proposed 69.9-km-long autonomous rail transit (ART) system. A total of 38 units have been ordered for use on three lines of the ART.

The trains are set to undergo a 3-month trial operation.

The train sets feature a hydrogen-powered propulsion system and a 70 MPa hydrogen storage system. Compared to their electric counterparts, these offer longer range, shorter refuelling time, and lower carbon emissions. The vehicles can travel up to 245 km on a full tank.
Source: *https://southeastasiainfra.com/hydrogen-powered-tram-delivered-to-kuching-city/*

1.9 China

China has 16.2 million new energy vehicles running on roads by June 2023

10th July 2023. By Monika From Gasgoo

Shanghai (Gasgoo) - According to statistics from China's Ministry of Public Security, as of the end of June 2023, the number of motor vehicles in use reached 426 million nationwide, including 328 million cars.

In the first half of 2023, there were 16.88 million newly registered motor vehicles nationwide, an increase of 1.9% compared to the same period last year. The number of newly registered cars reached 11.75 million, a 5.8% year-on-year increase. Among them, there were 10.34 million newly registered passenger cars, a 5.6% year-on-year increase, and 1.33 million newly registered goods-carrying vehicles, an 8.1% year-on-year growth.

As of the end of June, the total number of new energy vehicles (NEVs) running on roads in China had reached 16.2 million, accounting for 4.9% of the total number of cars. Among them, there were 12.594 million pure electric vehicles, accounting for 77.8% of the total NEV population.

In the first half of the year, there were 3.128 million newly registered NEVs, a 41.6% year-on-year increase, reaching a historical high. NEVs accounted for 26.6% of the total car registrations for this period.

As of the end of June, there were 88 cities in China with a car population exceeding one million units, an increase of seven cities compared to the previous year. Among them, 41 cities had over two million cars, and 24 cities had over three million cars. Beijing and Chengdu had over six million cars, while Chongqing, Shanghai, and Suzhou had over five million cars.

By the end of June 2023, the number of licensed drivers of motor vehicles in China had reached 513 million, of which 475 million were car drivers, accounting for 92.7% of the total number of drivers.

In the first half of 2023, there were 11.91 million newly licensed drivers, an 8% year-on-year increase. Since the introduction of the "light-duty trailer" driving license category (C6), 950,000 people have obtained the C6 driving license, better meeting the travel needs of driving small recreational trailers and facilitating camper tourism.
Source:
https://autonews.gasgoo.com/china_news/70023562.html?utm_source=edma&utm_medium=email&utm_content=endingyue&utm_campaign=service&systemPlat=EDM_EN&userId=leegs@angva.org&From=2023-07-10

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