ANGVA2U Info aims to share information, data, and news related to low carbon, carbon neutral, and zero carbon fuels towards Net Zero Emissions target and limiting earth temperature rise to 1.5 ^{0}C by the year 2100. These information, news, and insights, are shared in good faith, without any guarantee of accuracies. ANGVA members are advised to use these information, news, and insights, prudently and at their own risks.

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1.0 Introduction

This newsletter aims to keep members abreast with the latest news on NGVs, Renewable Natural Gas (RNG) / Biomethane, Renewable Fuels, and other related news. Members can contact ANGVA Secretariat if they have any comments related to this newsletter.

2.0 Natural Gas – Low Carbon Fuel

2.1 India

Adani Total Gas to invest Rs 16,000 crore in CNG, LNG infra expansion over 7 years
13th Feb 2025.

As of December 2024, ATGL has a compressed natural gas (CNG) station network of 605 stations and 9,22,000 domestic homes on pipe natural gas.

Adani Total Gas Ltd (ATGL), the equal joint venture of Adani Group and French energy giant TotalEnergies, will invest Rs 16,000 crore in the next seven years to expand its network of CNG stations and pipeline network to tap into the country's growing appetite for natural gas, a senior company official said.

"We are very optimistic and hopeful on the natural gas consumption story and we will continue to invest to expand infrastructure," Suresh Manglani, executive director and CEO, ATGL told ET on the sidelines of the India Energy Week.

As of December 2024, ATGL has a compressed natural gas (CNG) station network of 605 stations and 9,22,000 domestic homes on pipe natural gas. Its steel pipeline infrastructure has now increased to 13,000-inch kilometres.

The company also has 1,914 EV charging points across 22 states. It aims to reach around 3,000 charging points by March to April this year.

The presence of our EV charging points has now increased to almost 20 airports in the country.

"We have entered into another adjacent business called LNG for transport and mining (LTM) which could be another big opportunity for us," added Manglani. ATCL commissioned its first LNG station in Tirupur, Tamil Nadu last year and has a few more LNG stations at various stages of construction and commissioning.

LNG trucks are called long-haul vehicles, as they have a driving range of 600-1,000 km in a single fuel fill, giving them an edge over other fuels. LNG's higher energy density and lower per-kilogram cost allow for lower TCO (total ownership cost) than diesel.

The company plans to build a network of 50 LNG retail outlets along major highways, ports, mines, and industrial hubs by investing Rs 200-250 crore over the next 3-5 years.

Setting up an LNG station costs anywhere up to Rs8-12 crore while a fuel retail outlet costs only up to 1.5 crore. Improved road infrastructure and liquefied natural gas pricing have made the long-haul LNG trucking segment attractive for energy companies.
Source: *https://energy.economictimes.indiatimes.com/amp/news/oil-and-gas/adani-total-gas-to-invest-rs-16000-crore-in-cng-lng-infra-expansion-over-7-years/118204328*

2.2 India

CNG BPCL Expands LNG Business with Five-Year ADNOC Deal

13th Feb 2025. By CID Editorial Team

Bharat Petroleum Corporation Limited (BPCL) is set to expand its gas business, aiming to double its market share in the next five years.

As India pushes for a greener energy ecosystem, the company is focusing on liquefied natural gas (LNG) to drive its transition.

LNG Supply Deal with ADNOC

To meet the rising demand for natural gas, particularly in city gas distribution (CGD), BPCL is finalizing a five-year LNG supply deal with Abu Dhabi National Oil Company (ADNOC).

The agreement, valued at around 0.45 million tons per annum, will be signed during India Energy Week (IEW) 2025.

Major Investments in Gas Business

BPCL's Director (Finance), VRK Gupta, highlighted the company's aggressive expansion plans. "Currently, our gas business accounts for about 4% of our portfolio, but we aim to increase it to at least 8-9%," he stated.

To achieve this, BPCL plans to invest ₹25,000 crore over the next five years in the CGD business, covering both compressed natural gas (CNG) and LNG infrastructure.

LNG Trucks

BPCL sees significant potential in LNG-powered trucks as an alternative to diesel for long-haul transportation. The company believes LNG adoption in trucking could play a crucial role in reducing emissions and improving fuel efficiency.

Exploring Long-Term LNG Contracts

During BPCL's Q3 FY25 investor call, Gupta addressed the company's strategy for securing natural gas supplies.

"We are evaluating long-term contracts to bridge the shortfall in APM gas. These could be based on Henry Hub pricing or other index-based cargo-sharing agreements," he explained.

Expanding RLNG Infrastructure

BPCL has already established two regasified LNG (RLNG) stations and plans to build ten more along key highways. This expansion, expected to cost ₹150-200 crore, will enhance India's LNG refueling network.

India's Growing Energy Demand

India's energy consumption is increasing at a rapid pace. While global energy demand grows by 1.2-1.3% annually, India's demand is rising at 4-4.5%.

The country currently consumes around 5.4-5.5 million barrels per day (mb/d), a figure projected to reach 8.5 mb/d by 2040.

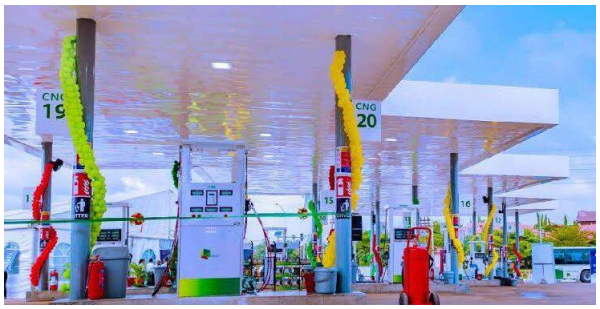
LNG as a Key Alternative

Gupta emphasized the need for alternative energy sources. "India doesn't produce enough energy to meet future demand. Renewable energy and electric vehicles (EVs) take time to scale, and green hydrogen remains expensive. That leaves LNG as a viable option, given its lower CO_2 emissions," he said.

As reported by thehindubusinessline.com, with a strong commitment to LNG, BPCL is positioning itself at the forefront of India's energy transition, ensuring cleaner and more efficient fuel alternatives for the future.
Source: *https://chemindigest.com/bpcl-expands-lng-business-with-five-year-adnoc-deal/*

2.3 Nigeria

NNPC deploys five new CNG cascades in Abuja to boost gas availability
29th January 2025. By Emem Udoh



The Nigerian National Petroleum Company Limited (NNPC) has commenced the deployment of five new Compressed Natural Gas (CNG) cascades at designated stations in Abuja, effective today.

This initiative aims to enhance the supply of CNG, providing users with improved access and a more efficient refueling experience.

NNPC reaffirmed its commitment to ensuring a smoother refueling experience by actively monitoring user feedback and making necessary adjustments.

The company expressed optimism that this initiative will help reduce waiting times, making CNG refueling more accessible and convenient for riders.

"As part of our commitment to enhancing gas availability, NNPC is deploying five (5) new cascades in Abuja starting today.

"This will increase the supply of CNG at designated stations, improving access for users. We're actively monitoring feedback to ensure a smoother refueling experience, and we're optimistic this will help reduce waiting times for riders,"

The deployment aims to improve CNG availability and accessibility to users.

What you should know

Compressed Natural Gas (CNG) is a more affordable and environmentally friendly alternative compared to gasoline and diesel. Its lower price makes it an attractive choice for mass transit and industries, leading to significant fuel savings and boosting economic efficiency over time.

 The Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) recently announced that Nigeria's CNG conversion grew by over 2,500% in 2024. This growth was driven by the Presidential Compressed Natural Gas Initiative (PCNGI), which has increased the number of CNG-powered vehicles and trucks in the country to around 50,000 as reported by Nairametrics.

 This deployment of these new cascades aligns with the Presidential CNG Initiative (PCNGi), which seeks to expand the adoption of Compressed Natural Gas (CNG) as a cleaner and more affordable alternative fuel as this will also enhance gas availability and improve accessibility at designated refueling stations.

 Compressed Natural Gas (CNG) is solely focused on making transportation more affordable by powering mass transit and industries with cheaper, cleaner, safer, and more reliable domestically produced.

 The Nigerian National Petroleum Company Limited (NNPC) is actively monitoring user feedback to ensure a seamless refueling process. The deployment of these cascades is anticipated to significantly reduce waiting times for riders, thereby promoting a more efficient and user-friendly experience at CNG stations.

The deployment of five new CNG cascades in Abuja represents a significant step toward enhancing energy accessibility and promoting the adoption of cleaner fuel alternatives in Nigeria.
Source: *https://nairametrics.com/2025/02/05/nnpc-deploys-five-new-cng-cascades-in-abuja-to-boost-gas-availability/#google_vignette*

2.4 Tanzania

CNG stations to be installed for government vehicles

13th February 2025. By Rodgers Luwhago

DODOMA: PLANS are underway by the government to install Compressed Natural Gas (CNG) stations in few selected areas to facilitate the use of gas in its vehicles, it has been stated.

Deputy Minister for Natural Resources and Tourism, Dunstan Kitandula, spoke of the plan in Parliament yesterday when responding to the question posed by Chadema Special Seats legislator Grace Tendega, on behalf of the Minister for Energy.

In her question, Ms Tendega sought an answer from the government on its strategy to ensure its vehicles run on gas. In his response, Mr Kitandula said currently the government focuses on preparing infrastructure that will facilitate the use of CNG in its vehicles.

He said, the government, through the Government Procurement Services Agency (GPSA), has begun working on procedures for installation of CNG infrastructure to serve government vehicles.

He said before the construction of CNG infrastructure, Environmental and Social Impact Assessment (EISA) must be conducted in the selected areas of the projects. Furthermore, he said before installing the infrastructure, detailed architectural designs must be prepared.

According to the deputy minister, to avail CNG for vehicle use along Dar es Salaam – Dodoma highway, the Tanzanian Petroleum Development Corporation (TPDC) is currently in the procurement stage for the project to install mobile CNG stations in Dar es Salaam Region (3), Morogoro Region (1) and Dodoma Region (2).

In her supplementary question, Ms Tendega sought the government stand on the possibility of involving private sector in ensuring vehicles that are imported arrive in the country with already installed CNG systems.

Furthermore, the opposition legislator asked the government on the possibility of waving tax on vehicle CNG conversion kit, given the fact that currently installing CNG system costs between 2m/- and 3m/-, a price that is too high.

In his response, the minister said to encourage the use gas-powered vehicles, the government dropped its intention of extending fuel tax on CNG use in 2024/2025 budget.

It would be recalled that the government dropped the decision after Members of Parliament and the general public faulted the move, saying it was retrogressive in promoting the use of natural gas.

In November last year, the government said it was exploring ways to reduce or eliminate import duties on gas-powered vehicles and their components to encourage more Tanzanians to adopt to cleaner energy options.

According to Mr Kitandula, the incentives offered have started attracting various institutions to import gas-powered vehicles. Giving an example, the deputy minister said the government has approved a request from UDART to import 755 gas powered buses.

On the possibility of reducing tax on imported vehicle CNG conversion equipment, the deputy minister said the government, though various institutions such as TPDC, Tanzania Revenue Authority and the Ministry of Finance, is exploring areas that can benefit from tax reduction or exemption so that the equipment can be acquired at affordable prices.

Furthermore, Mr Kitandula said TPDC is searching for investors who are ready to establish industries that can produce CNG vehicle conversion kits.

Experts note that CNG is more economical than petrol and diesel. For example, the Dar es Salaam Institute of Technology (DIT) reports that a kilogram of CNG currently costs 1,500 shillings, while a litre of f petrol in Dar es Salaam costs 2,800/-.
Source: *https://dailynews.co.tz/cng-stations-to-be-installed-for-government-vehicles/#google_vignette*

3.0 Biomethane / Renewable Natural Gas (RNG) – Carbon Neutral Fuel

3.1 India

BMC allocates Rs 300-cr for solid waste management, plans bio-CNG plant at Deonar
5th February 2025.

The Brihanmumbai Municipal Corporation (BMC) has allocated Rs 300 crore in its budget for solid waste management initiatives, including setting up a bio-CNG plant at the Deonar dumping ground.

The BMC has signed an MoU with Mahanagar Gas (MGL) for setting up the bio-CNG plant, which will be run by using 1,000 tonne of wet waste supplied by the civic body. The plant is expected to be operational within two years. The BMC will provide land for the plant, and the concession agreement process is currently underway.

Under this initiative, wet waste generated from hotels, restaurants, and vegetable markets will be collected, segregated, and transported to the plant using dedicated vehicles. Once processed, the waste will be converted into bio-CNG. Mumbai generates around 6,500 tonne of waste daily, of which 3,500 tonne is wet waste. The plant aims to recycle about one-third of the city's wet waste, reducing its environmental footprint and contributing to sustainable waste management practices.

Source: *https://www.projectstoday.com/News/BMC-allocates-Rs-300-cr-for-solid-waste-management-plans-bio-CNG-plant-at-Deonar*

3.2 India

"Future is LNG": IGL executive director highlights role of bio-gas and LNG in energy transition

14th February 2025. ANI

Speaking to ANI on the sidelines of India Energy Week 2025, Bhatia outlined how IGL is leveraging agricultural waste and other free stock to produce Compressed Bio-Gas (CBG).

New Delhi [India], February 14 (ANI): Sanjeev Kumar Bhatia, Executive Director of Indraprastha Gas Limited (IGL), emphasized the growing importance of Liquefied Natural Gas (LNG), saying that "the future is LNG."

Speaking to ANI on the sidelines of India Energy Week 2025, Bhatia outlined how IGL is leveraging agricultural waste and other free stock to produce Compressed Bio-Gas (CBG).

He explained that the company chemically treats waste to convert it into methane, a natural gas that can be supplied through pipelines or used as a vehicle fuel at IGL outlets.

"Garbage and other free stock like agri-waste are chemically treated and converted into CBG. CBG is nothing other than methane, which is a natural gas. which is essentially methane. Now, we can directly supply this gas through a pipeline or our outlets for vehicles," Bhatia said.

In some locations where LNG is required, CBG can also be converted into LNG. While the current focus is on CBG, the future is LNG. This is the whole model," Bhatia said.

India Energy Week 2025 was envisioned as more than just another industry conference--it was designed to be a dynamic platform redefining global energy dialogues. In just two years, this self-funded initiative has achieved precisely that, becoming the world's second-largest energy event.

The event, inaugurated by Prime Minister Narendra Modi on February 11, concludes today, February 14. (ANI)

(The story has come from a syndicated feed and has not been edited by the Tribune Staff.)

Source: *https://www.tribuneindia.com/news/business/future-is-lng-igl-executive-director-highlights-role-of-bio-gas-and-lng-in-energy-transition/*

3.3 Malaysia

Joint Malaysia-Singapore biofuels hub to drive $337 million green investment

7th February 2025. Author: Lin Bo-yu .

Malaysia's BAC Renewable Energy to build a biofuel storage and export hub at Tanjung Langsat Port in Johor. (Image: TLP Terminal)

A new biofuels hub focused on Bio-Liquefied Natural Gas (Bio-LNG) will be established in the Johor-Singapore Special Economic Zone (JS-SEZ), with the capacity to process 350,000 tons of Bio-LNG annually.

Developers emphasize that this cross-border collaboration has already secured partial funding, with green investments expected to reach 1.5 billion ringgit (about 337 million USD).

Bio-LNG processing hub with an annual capacity of 350,000 tons

On Feb. 6, Malaysia's biofuel company BAC Renewable Energy (BAC RE), along with Singapore's Dovechem Group and Tanjung Langsat Port Terminal (TLP Terminal), signed an MOU to build a biofuels plant in Johor. The project, named the "BAC RE ASEAN Biofuels Storage and Exporting Hub," aims to serve as a major regional biofuel facility.

According to the agreement, BAC RE will oversee the development, while Dovechem Group will provide the land and take on operational responsibilities. TLP Terminal, a subsidiary of Johor Corporation (Johor Corp), will manage port operations.

The project will be carried out in two phases. In the first phase, the hub will have the capacity to produce and handle 33,000 tons of Bio-LNG annually, with a storage capacity of approximately 7,500 cubic meters. This will gradually scale up to 350,000 tons per year, with an estimated construction cost of 150 million ringgit (about 33.7 million USD). In the second phase, the facility will expand its services to include storage and processing of Bio-Methanol.
Source: *https://www.reccessary.com/en/news/my-market/joint-malaysia-singapore-biofuels-hub*

3.4 Germany

OG Clean Fuels opens 150th Bio-CNG station in Germany

14th February 2025.

This development reflects the company's ongoing growth in both revenue and network expansion

February 2, 2025. OG Clean Fuels started the year by opening its 150th Bio-CNG station in Germany through the acquisition of a site in Ludwigsburg.

The company plans to further increase its Bio-CNG network, aiming to operate around 160 stations by the end of January 2025. The expansion primarily focuses on southern and western Germany, with OG Clean Fuels emphasizing collaboration with transport and logistics companies as a key part of its growth strategy.

Bio-CNG, a fuel made from biodegradable waste materials such as organic household waste, offers up to 90% lower CO2 emissions compared to conventional fossil fuels.

With this milestone, OG Clean Fuels reinforces its position as a leader in the operation of CNG stations in Germany, contributing to a more sustainable transportation industry.
Source: *https://www.gnvmagazine.com/en/og-clean-fuels-opens-150th-bio-cng-station-in-germany/*

3.5 Ukraine

Ukraine has started supplying biomethane to the EU.

10th February 2025. .

The State Customs Service has completed the customs declaration required to move the first batch of biomethane across Ukraine's customs border for export to Europe by pipeline.

"Ukraine has enormous potential for biomethane production and can be an important supplier of green energy on the European market," the customs service added.

In the transfer, the Vitagro group of companies exported a test batch of biomethane to Germany. In the future, the Vitagro biomethane plant in the Khmelnytskyi region will produce three million cubic meters of gas annually for export, equivalent to the annual consumption of approximately 2,000 German households. The company is already considering the possibility of further investment in biomethane projects.

The Bioenergy Association of Ukraine notes that natural gas in Europe costs about €500 per 1,000 cubic meters, while the average price of biomethane is about €900 per 1,000 cubic meters. However, the price of the resource depends greatly on the raw material and the sector to which it is sold.

Source: *https://ubn.news/ukraine-has-started-supplying-biomethane-to-the-eu/*

3.6 Spain

Naturgy's green gas injection capacity grows 30% in 2024 thanks to eight operating biomethane plants

11th February 2025. POSTED BY: THE CORNER .

Alphavalue/ Divacons | Nedgia, Naturgy's gas distributor, has increased the green gas injection capacity in its network by more than 30% over the last year. Currently, eight biomethane plants are connected and in operation, with a combined capacity of 226 GWh of green gas, which contributes to avoiding the emission of 40,500 tonnes of CO2 into the atmosphere, as reported yesterday by Naturgy in a press release.

In the short and medium term, Nedgia will add another 53 plants to those already in operation that have already signed an agreement, which will allow it to add another 3,365 GWh in total, a figure that will multiply the current figure by almost 15 and is equivalent to the consumption of more than 670,000 homes.

Source: *https://thecorner.eu/54/naturgys-green-gas-injection-capacity-grows-30-in-2024-thanks-to-eight-operating-biomethane-plants/118875/*

3.7 United States of America

EnviTec Biogas Expands RNG Segment For Carbon-Neutral Fuel Production.

6th February 2025. By Beth Anton

Climate neutrality in the transport sector is possible in the form of bio-LNG. The all-rounder RNG acts as a carbon-neutral fuel alternative that can help reduce emissions, especially in the

heavy-duty transport sector. EnviTec Biogas produces RNG suitable for use as fuel for precisely this market at its own plants, including those in Güstrow, Forst, and Friedland.

In Forst, the bio-LCO2 is stored in two storage tanks (Photo: EnviTec Biogas)

The two sites in Forst and Friedland have now been successfully expanded with investments of around $52 million.

The capacity of the 435 scfm plant owned and operated by EnviTec Biogas in Forst, Brandenburg, has thus been doubled. Since September 2014, the facility has been supplying around 60,000 megawatt-hours of green energy, and as of December 2024, the expanded facility now produces double that amount.

"To achieve this, a new technical building with two mixing lines was constructed, the separation system was converted, and a press cake storage hall with exhaust air cleaning and a new concentrate storage facility were built," explains Frank Hinken, Managing Director of the own plant operations company in Forst.

Furthermore, a hall for storing dry chicken manure and a biomethane-powered combined heat and power plant (CHP) were built, contributing to the self-supply of electricity and heat. The heat is mainly used for the six digesters, each of which has a volume of 5,800 m³, as well as for the halls and the new administration building.

An adjacent property was acquired for the storage of the effluent from the separation, where a total of three manure storage tanks, each with a volume of 15,638 m³, have been built.

"In addition to doubling the gas upgrading capacity, the main focus of the construction work was on the addition of a CO2 liquefaction plant, including a new hall," says Hinken.

The approximately 17,637 short tons of food-grade LCO2 produced annually in Forst will be purchased by EnviTec's customer Carbo Kohlensäurewerke GmbH & Co KG, as is already the case in Güstrow.

In addition to Forst, the expansion of the plant in Friedland, Mecklenburg-Western Pomerania, has also been completed. Over the past twelve months, six new containers, a 269 scfm EnviThan plant, technical buildings, and a dosing system have been constructed at the site.

Thanks to the expansion measures, the plant, which has been in operation since 2007, will produce an additional 43 GWh of biomethane per year, available for use in the fuel sector.
Source: *https://www.renewableenergymagazine.com/biogas/envitec-biogas-expands-rng-segment-for-carbonneutral-20250206*

4.0 Hydrogen – Zero Carbon Fuel

4.1 Japan

Toyota's global hydrogen car sales plummet over past year as market collapses outside of Japan

5th February 2025. By Polly Martin. Senior Reporter

A promotional image of a Toyota Mirai for the UK marketPhoto: Toyota

Toyota has reported just 1,778 of its fuel-cell electric vehicles (FCEVs) sold worldwide over the course of 2024 — a 55.8% drop from its sales the year before.

Less than 2,000 Mirai fuel-cell vehicles were sold worldwide in 2024, with domestic market buoyed by favourable subsidy scheme

This marks Toyota's worst year for FCEV sales since 2020, when just 1,770 were sold worldwide in the context of a global pandemic.

The downturn has mainly been driven by a sharp drop in sales in non-Japanese markets, where the automaker recorded 1,102 cars sold last year compared to 3,575 in 2023.

Analysts have generally attributed falling sales across Europe, North America and South Korea over the past year to the high price of H2 at the pump and lack of reliable fuelling infrastructure in these markets, which have put off potential customers. However, Toyota did record 676 FCEVs sales in Japan last year, a 50.9% uptick from 2023.

The improved sales in Toyota's home market could be down to Japan's generous subsidy system. In June last year, the government announced that it would offer up to ¥2.5m ($16,363) for FCEVs registered since April 2024, compared to a maximum of ¥850,000 for battery-electric vehicles.

Given an entry-grade Mirai costs ¥7.4m, this would knock the price down to ¥4.9m, or just ¥250,000 more expensive than Toyota's battery-electric bZ4X assuming both vehicle types receive the maximum available subsidy.

Toyota may also have benefitted from introducing a second hydrogen-powered car to the Japanese market, the fuel-cell version of its Crown sedan. In international markets, the Japanese firm only offers the Mirai, which had been launched back in 2014.

However, 2024 is still far from Toyota's best year of hydrogen car sales in its home market. The automaker had sold 2,447 FCEVs in 2021, with less than 1,000 in sales in Japan every year since. By contrast, Toyota sold 139,892 battery-electric vehicles worldwide in 2024, a 34.5% increase from the year before.

Unlike FCEVs, this growth was primarily seen in markets outside of Japan, with sales in Toyota's domestic market shrinking by 30.5% to 2,038 last year.

However, both zero-emission vehicle types were dwarfed by sales of hybrid-electric vehicles, which represented more than four million of the ten million vehicles sold by Toyota in 2024.
Source: *https://www.hydrogeninsight.com/transport/toyotas-global-hydrogen-car-sales-plummet-over-past-year-as-market-collapses-outside-of-japan/2-1-1775310?utm_campaign=2025-02-06&utm_content=hydrogen&utm_medium=email&utm_source=email_campaign&utm_term=recharge*

4.2 Global

Global hydrogen refueling network surpasses 1,000 stations in 2024

12th February 2025.

Around 125 new hydrogen stations were added last year across the world, according to H2stations.org.

© Matematik - Adobe Stock

The global hydrogen refueling infrastructure reached a significant milestone in 2024, with over 1,000 stations now in operation worldwide. According to the 17th annual evaluation

by H2stations.org, around 125 new hydrogen stations were added last year across the world.

Europe saw 42 new stations come online, bringing its total to 294. Germany remained the continent's leader with 113 stations, followed by France (65), the Netherlands (25), and Switzerland (19). The first hydrogen stations in Bulgaria and Slovakia were established in their respective capitals, marking new additions to the network.

Asia continued to dominate in hydrogen refueling expansion, with 748 stations in operation by the end of 2024. China accounted for the largest share, hosting 384 stations, while South Korea had 198 and Japan 161. South Korea retained its position as the global leader outside of China in new station openings, adding 25 locations last year. Despite challenges in data accessibility, H2stations.org was able to confirm details for 203 hydrogen stations in China.

In North America, 13 new stations were opened in 2024. Canada saw an increase of four stations, bringing its total to 12, while the United States opened nine new stations but decommissioned 12, reducing the overall count to 89. Of these, 74 were located in California. The fluctuation in operational stations highlights the evolving nature of the hydrogen refueling landscape, with factors such as infrastructure maintenance and market viability influencing station availability.

Beyond established markets, hydrogen infrastructure is expanding to new territories. New Zealand, Bulgaria, and Slovakia were added to the list of countries with operational hydrogen refueling stations, contributing to a global network now spanning 45 nations. Additionally, plans are underway for at least 377 new stations outside China, indicating continued investment in hydrogen as a key player in the transition to sustainable mobility.

As hydrogen adoption gains momentum, infrastructure development remains a critical factor in scaling up the technology's role in the energy transition. While Asia leads in expansion, Europe and North America continue to refine their networks, balancing new openings with strategic adjustments in station deployment.
Source: *https://www.mobilityplaza.org/news/40351*

5.0 Electricity – Electric Vehicles (EVs)

5.1 United States of America

California EVs sales stall

10th February 2025. KALW | By Sunni Khalid

An electric vehicle being charged

California's push to electrify its cars is facing a potentially serious problem: people aren't buying them fast enough.

After three straight years of strong growth, sales of electric vehicles have stalled in California, raising questions that the state will be able to meet its groundbreaking mandate to end sales of gas-powered automobiles.

CalMatters reports about a quarter of all new cars registered in the state last year were zero emissions – just percentage points higher than in 2023. That's according to new California Energy Commission data.

The flat sales follow years of strong growth for EVs. In 2020, only one of 13 cars sold had zero emissions. That share is now three times higher than it was four years ago.

But the sluggish sales have slowed the pace of growth in the market, putting the state's climate and pollution goals at risk.

Under California's mandate, approved three years ago, 35 percent of new 2026 model vehicles sold by automakers must be zero emissions. Some new 2026 models will roll out later this year.

That requirement increases to nearly 70 percent for 2030 models. In 2035, all sales of gas-powered vehicles will be banned.
Source: *https://www.kalw.org/bay-area-news/2025-02-10/california-evs-sales-stall*

5.2 China

China has over 30 million new energy vehicles running on roads by 2024
22nd January 2025. Amara From Gasgoo

Shanghai (Gasgoo)- China had 453 million motor vehicles running on roads by the end of 2024, with 353 million being automobiles, the country's Ministry of Public Security announced on January 17, 2025.

In 2024, 35.83 million motor vehicles were registered in the country, representing a 2.98% year-on-year growth. Among them, automobiles accounted for 26.9 million units, up 9.53% from the previous year.

As of 2024, China has recorded over 30 million motor vehicles in annual registrations for 10 years in row. By the end of 2024, 96 cities in the country boast automobile population exceeding one million units, with an increase of 2 cities compared to the same period in 2023. Among these, 45 cities surpass two million units, and 26 cities exceed three million units. Six cities including Chengdu, Beijing, Chongqing, Suzhou, Shanghai, and Zhengzhou take the lead, each with more than five million vehicles.

As of 2024, the total number of new energy vehicles (NEVs) in China reached 31.4 million units, accounting for 8.9% of the entire automobile fleet. Among them, pure electric vehicles account for 22.09 million units, making up 70.34% of the total NEV count.

In 2024 alone, 11.25 million NEVs were registered, making up 41.83% of total new automobile registrations and showcasing a 51.49% year-on-year surge.

By the end of 2024, there have been 542 million motor vehicle drivers registered in China, with automobile drivers reaching 506 million, making up 93.46% of the total. In 2024, the country issued new driving licenses to 22.26 million individuals.
Source:
https://autonews.gasgoo.com/china_news/70035763.html?utm_source=edma&utm_medium=email&utm_content=endingyue&utm_campaign=service&systemPlat=EDM_EN&userId=leegs@angva.org&From=2025-01-21

End