#### ASIA PACIFIC NATURAL GAS VEHCLES ASSOCIATION (ANGVA) Together we propagate and support the efficient utilization of low to net zero carbon fuels

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## ANGVA2U Info 03/2022. 1<sup>st</sup> April 2022 (for ANGVA members only)

ANGVA2U Info aims to share information, data, and news related to low and net zero carbon fuels with ANGVA members. However, these information, data, and news are collected and shared in good faith, without any guarantee of accuracies. Members are advised to use these information and data prudently and at their own risks.

#### 1.0 Selected News / Articles

#### 1.1 United Arab Emirates (UAE) ADNOC Distribution opens first dedicated CNG refueling station

29th March 2022. Gulf News Report.

#### It's one of the 30 locations where ADNOC service stations offer CNG



Abu Dhabi: Fuel retailer ADNOC Distribution opened the company's first dedicated compressed natural gas (CNG) refueling station on Tuesday.

Located at Al Falah Street on Abu Dhabi Island, the station has been fully refurbished to offer natural gas vehicles (NGVs) access to convenient refueling in the city center.

The station is located at Al Falah Street on Abu Dhabi Island.Image Credit: Supplied

The dedicated station is one of the 30 locations where CNG is offered at ADNOC service stations across the country.

"The demand for CNG has risen steadily in recent years – both with large scale businesses, including taxi companies, as well as every day consumers," said Eng. Bader Saeed Al Lamki, CEO, ADNOC Distribution. "The new station aims to bring convenient, inner-city access to CNG fueling, with four dedicated pumps. We now have seven stations offering CNG located on Abu Dhabi Island, and many more throughout the UAE."

ADNOC Distribution has been offering the alternative fuel at its service stations for more than a decade, with the first NGV conversions conducted in September 2010. To date, over 10,000 vehicles have been converted to operate on CNG. CNG burns more efficiently than conventional fuels, helping to reduce pollution and carbon footprint. It is also regarded as one of the safest, and most cost-efficient auto fuels available.

Source: <u>https://gulfnews.com/business/energy/adnoc-distribution-opens-first-dedicated-cng-</u> refueling-station-1.86810211

#### 1.2 India

### Top 5 most fuel-efficient factory-fitted CNG cars sold in India

24<sup>th</sup> March 2022. Abhinav Jakhar

We've compiled a list of the most economical CNG cars in India, and yes, all of them are Maruti Suzuki cars.



There are a total of 12 factory-fitted CNG cars in India.

There are a total of 12 factory-fitted CNG cars sold in the country, all of which fall under the Rs 10 lakh (ex-showroom) category. The prices range between Rs 4.95 lakh for the Maruti Suzuki Alto 800 and go up to Rs 9.87 lakh (ex-showroom) for the Ertiga. There are also a few commercial vehicles, which aren't available for the public to purchase. However, since the idea of CNG cars, surely, is to have a fuel-efficient and clean way of motoring. So, we've compiled a list of the most economical CNG cars in India, and yes, all of them are Maruti Suzuki cars. However, we've also added some honourable mentions towards the end of the article, along with all the other factory-fitted CNG cars sold currently.

#### Maruti Suzuki Celerio

The Celerio S-CNG is the most fuel-efficient of the lot, with a mileage of 35.6 km/kg (kilometre per kilogram), which is mighty impressive. Maruti Suzuki is said to have improved its S-CNG cars, which in total add up to seven models. It's powered by a 1.0-litre, three-cylinder, K-Series engine which produces 59PS of peak power and comes mated to a five-speed manual transmission.

#### Maruti Suzuki Wagon R

The Wagon R comes in second with 34.05 km/kg, and is a lot more spacious than the Celerio, in that respect. It, too, is powered by the same 1.0-litre, three-cylinder, K-Series engine which produces 59PS of peak power and comes mated to a five-speed manual transmission. It's priced from Rs 6.34 lakh (ex-showroom).

**Maruti Suzuki Alto 800**The ubiquitous Alto 800 is next on the list with a mileage of 32.99 km/kg, which does make it rather pointless since there is a much more spacious and modern sibling out there with better fuel economy. It must be said though, that the Alto is in desperate need of a serious upgrade soon. It's powered by an 800cc, three-cylinder petrol engine with 39PS of peak power.

#### Maruti Suzuki S-Presso

The boxy-yet spacious S-Presso follows the Alto with a fuel efficiency figure of 31.2 km/kg, which is impressive but puts the S-Presso in a similar predicament to the Alto 800. If one can go ahead and buy a Wagon R, then would the S-Presso stand a chance? Yes, price is a factor but so is space and size.

#### Maruti Suzuki Dzire

Then there's the freshly launched Maruti Suzuki Dzire, which is priced from Rs 8.14 lakh (exshowroom) and boasts a fuel economy figure of 31.12 km/kg. It's powered by a slightly peppier 1.2-lite, four-cylinder petrol engine which produces 77PS of peak power.

Although they aren't the most fuel-efficient CNG cars sold in India, a special mention must go out to the Tata Tiago iCNG and Tata Tigor iCNG, as well. They are immensely safer than some of the CNG cars mentioned on this list, and that has to count for something. Other CNG cars on the market include the Hyundai Santro, Hyundai i10 Nios, Hyundai Aura, Maruti Suzuki Eeco and the Maruti Suzuki Ertiga. However, one overbearing fact is that no factoryfitted CNG car in India comes with an automatic gearbox.

Source: <u>https://www.firstpost.com/auto/top-5-most-fuel-efficient-factory-fitted-cng-cars-sold-in-india-10486301.html</u>

#### 1.3 India

#### CNG prices have increased by up to 37% in past six months

30<sup>th</sup> March 2022. By Sanjeev Choudhary. ET Bureau

#### Synopsis

Adani Gas has raised CNG prices in Ahmedabad by 37% while Gujarat Gas has increased rates in all its operating areas in Gujarat by 30%. In Delhi, Indraprastha Gas has raised rates by 33% while in Mumbai, Mahanagar Gas has hiked prices by 27%. In March alone, prices have risen by ₹9.6 per kg in Ahmedabad and ₹7 in Delhi.



CNG price hikes have also helped offset the input cost rise due to the increase in rates of LNG, which comprises about 10-15% of the gas mix for CNG customers.

<u>Compressed natural gas</u> (CNG) prices have risen sharply in the country in the past six months, with some cities recording as much as a 37% increase, on the back of a push by city gas distributors to cover their increased cost and maintain strong profit margins.

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By comparison, **<u>petrol</u>** and diesel prices have barely changed in the past six months though they are rising at a faster clip now to catch up with international rates. Petrol and diesel prices often attract political attention while CNG, due to its limited penetration in the country, largely escapes it.

City gas companies enjoy the double advantage of access to cheap and stable domestic gas and the pricing freedom for CNG that enjoys lower taxes compared to the heavily taxed competing fuels like petrol and diesel. This ensures extraordinary profit margins for city gas distributors.

In October, domestic natural gas prices had risen 62%, which resulted in CNG price hikes in October-November. Recent CNG price hikes are more about boosting profit in the transport segment at a time the industrial segment, which is primarily served by pricey liquefied natural gas (LNG), is suffering, an industry executive said. <u>LNG</u> prices have been extremely high in the past six months.

CNG price hikes have also helped offset the input cost rise due to the increase in rates of LNG, which comprises about 10-15% of the gas mix for CNG customers. City gas companies receive a domestic gas allocation, which is 10% more than the demand witnessed in the previous six months in each licensed area. Due to the second wave of Covid, the demand fell in the April-September period, resulting in an allocation for October-March that was less than the market requirements. This led to a higher share of LNG in the mix, lifting overall costs.

*Source:* <u>https://economictimes.indiatimes.com/industry/energy/oil-gas/cng-prices-have-increased-by-up-to-37-in-past-six-months/articleshow/90527425.cms</u>

#### 1.4 India

**CNG price down by Rs 6/kg, PNG by Rs 3.50 in Mumbai following VAT cut to 3%** 31<sup>st</sup> March 2022. Press Trust of India | Mumbai The Pro

The retail price of compressed natural gas (CNG) is cut by Rs 6 to Rs 60 per kg and domestic piped natural gas (PNG) by Rs 3.50 to Rs 36/scm in and around Mumbai effective Friday



The city gas utility Mahanagar Gas on Thursday announced a steep reduction in the retail price of CNG by Rs 6 per kg and piped gas by Rs 3.50 per scm, effective Friday, even as the Centre more than doubled the price of domestically-produced natural gas earlier in the day.

In a statement on Thursday, MGL said consequent to the reduction in VAT on natural gas from 13.5 per cent to 3 per cent from April 1 by the state government, MGL has decided to pass on the entire benefit to end-consumers.

Accordingly, the retail price of compressed natural gas (CNG) is cut by Rs 6 to Rs 60 per kg and domestic piped natural gas (PNG) by Rs 3.50 to Rs 36/scm in and around Mumbai effective Friday, it said.

When asked for a reaction to the price hike by the Centre for the producers, an MGL spokesperson told PTI that the company will evaluate the impact of the massive increase in supply prices in the due course of time and revise its retail prices accordingly.

Earlier in the day, the Centre more than doubled the price of domestically produced natural gas for the six months beginning April 1 on the back of a spike in global energy rates and the move will immensely benefit the likes of Reliance, ONGC and Oil India.

Accordingly, the price of gas from regulated fields of state-owned ONGC and Oil India will rise to a record USD6.10 per million British thermal units (mmBtu) from USD 2.90 per mmBtu now, according to a notification issued by the oil ministry's Petroleum Planning and Analysis Cell.

The rate paid for difficult fields like deepwater will rise to USD 9.92 per mmBtu for April-September from USD 6.13 per mmBtu, it said.

*Source:* <u>https://www.business-standard.com/article/economy-policy/cng-price-down-by-rs-6-kg-png-by-rs-3-50-in-mumbai-following-vat-cut-to-3-122033101215\_1.html</u>

#### 1.5 Thailand Cabinet okays THB45 billion for a slew of relief measures amid rising energy prices

30<sup>th</sup> March 2022. By The Nation.



The Cabinet on Tuesday approved urgent measures worth 45.10 billion baht to mitigate the impact of rising energy prices.

The measures aim to relieve the expense burden on workers in the transportation and agriculture sectors, as well as low-

income earners, said deputy government spokeswoman Rachada Dhnadirek.

The urgent measures include:

> Raising the price of liquefied petroleum gas (LPG) by only 15 baht per cylinder from April to June. The price will rise to 333 baht in April, 348 baht in May and 363 baht in June. This measure, to cost 6.38 billion baht, will come from the Oil Fund.

> Maintaining the natural gas for vehicles (NGV) retail price at 15.59 baht per kilogramme from April to June. The measure, costing 1.59 billion baht, will be carried out by PTT.

> Reducing the fuel tariff (FT) by 22 satang per unit for those who use no more than 300 units per month of electricity from May to August. The measure, to cost between 2 billion and 3.5 billion baht, will come from this year's central budget.

> Maintaining the diesel retail price at 30 baht per litre until the end of April. After that, the government will tackle the excess diesel price by half, or around 8 baht per litre, from May

to June. This measure will cost 33.14 billion baht and come from the Oil Fund and the Excise Department.

> Up to 157,000 motorcycle taxi drivers who had registered with the Department of Land Transport will receive a gasohol discount of 250 baht per month from May to July. The measure will cost 120 million baht and come from this year's central budget.

> Up to 17,460 taxi drivers who participated in the "NGV for the Same Breath" scheme can purchase NGV at 13.62 baht per kilogramme, but not exceeding a total 10,000 baht per month, from April to June. This measure, to cost 171 million baht, will be operated by PTT.

> Increasing the discount on cooking gas for 3.6 million state welfare cardholders from 45 baht to 100 baht per person per month from April to June. The measure will cost 200 million baht and come from this year's central budget.

> Up to 5,500 hawkers who hold state welfare cards will receive a discount of 100 baht per month on cooking gas from April to June. The measure will cost 1.65 million baht and be operated by PTT.

> Reducing social security contributions from 5 per cent to 1 per cent for 490,000 employers and 11.2 million employees under Section 33 from May to July.

> Reducing the contribution of 1.9 million insurers under Social Security Section 39 from 9 per cent to 1.9 per cent from May to July. This measure also includes the reduction in contribution by 10.7 million insurers under Section 40 from between 70 and 300 baht to between 42 and 180 baht from February to July.

"Separately, the Commerce and Agriculture ministries are accelerating guidelines to tackle fertiliser and animal feed issues, while the Oil Fund will suspend compensation payment for high-speed diesel from April," Rachada said.

"Meanwhile, the Cabinet has allocated money for the Oil Fund to maintain the stability of energy prices in the country and gain confidence among financial institutions in granting loans for the fund."

The Transport Ministry has been instructed to reduce expenses on registration renewals for trucks and public buses as well, Rachada said.

The Cabinet has meanwhile appointed the Finance Ministry, the National Economic and Social Development Council, the Budget Bureau and the Bank of Thailand to monitor and improve measures to help people amid rising global energy prices, she added.

Source: <u>https://www.nationmultimedia.com/in-focus/40013972</u>

#### 1.6 Brazil

## Shocking moment driver is forced to flee after his vehicle's illegal natural gas tank explodes while refueling at a Brazilian fuel station

18<sup>th</sup> March 2022. BY ADRY TORRES FOR DAILYMAIL.COM

- A Volkswagen's gas tank exploded in a bizarre incident caught on camera in Ceará, Brazil Wednesday
- The vehicle owner and station attendant were standing to the side of the car when the gas cylinder exploded inside the truck

- Authorities said the vehicle's tank was illegally installed by the unidentified owner, and contained 'irregularities' that caused the explosion
- The driver and worker did not suffer any injuries, but the Civil Police opened an investigation because the gas tank was reportedly taken from the scene



A gas station worker in Brazil seeks covers after a car's gas tank exploded as it was being refueled with natural gas Wednesday. The station worker immediately shut of the gas at the station moments after a car's illegal gas tank exploded in Brazil on Wednesday

The gas tank on a Volkswagen sedan exploded in a bizarre incident caught on camera in northeastern **Brazil** Wednesday, with authorities confirming that an illegally installed fuel cylinder was to blame for the blast.

The owner of the vehicle had stopped to refuel the car with natural gas at a station in Fortaleza, Ceará, on Wednesday when the explosion tore the car apart.

The gas station camera showed the driver standing in front of the car while the attendant waited nearby for the fueling to complete.

# Brazil's National Union of Vehicle Inspection Companies told G1 that the car's gas tank explosion was caused by a "sequence of errors,' among them being that the gas cylinder was illegally installed by the driver

Moments later, the gas tank blew up and destroyed the rear part of the car.

The car owner could be seen running away from the explosion while the station worker turned off the gas and avoided further catastrophe.

According to Brazilian news outlet G1, the gas cylinder landed about 200 feet from the gas station, damaged a wall and also struck a car in the area.

#### Authorities said that the gas station worker and the owner of the vehicle were not injured by the car's gas tank explosion

The owner of the wrecked Volkswagen and the gas station worker didn't suffer any injuries.

Fortaleza's Civil Police opened an investigation into the theft of the gas tank after the local fire department was unable to locate it at the scene hours after the incident.

Brazil's National Union of Vehicle Inspection Companies told G1 that the explosion was the byproduct of a "sequence of errors" involving the owner of the car and the gas station.

"The (owner) installed an irregular cylinder (gas tank), did not carry out the mandatory safety inspection," agency director Marco Neves said. "And the gas station did not require the

presentation of the inspection seal issued by one of the technical institutions accredited by INMETRO (National Institute of Metrology, Standardization, and Industrial Quality)."

<u>Source:</u> <u>https://www.dailymail.co.uk/news/article-10627701/Shocking-moment-vehicles-illegal-natural-gas-tank-explodes-Brazilian-gas-station.html</u>

#### **1.7 India Modi unveils India's largest Bio-CNG plant** 20<sup>th</sup> February 2022. By Shruti Tomar, Bhopal

The plant, set up on 15 acres of land in Devguradiya through a public-private partnership, is expected to produce 17,000 tonnes of biogas in a day from 550 tonnes of organic household waste such as fruit and vegetable peels and leaves generated in Indore city.



Prime Minister Narendra Modi also lauded the efforts of sanitation workers to keep India's cities clean. (PTI)

Prime Minister Narendra Modi on Saturday inaugurated the Govardhan project in Indore, India's largest Bio-CNG plant that will run on the principle of waste to wealth.

The plant, set up on 15 acres of land in Devguradiya through a public-private partnership, is expected to produce 17,000 tonnes of biogas in a day from 550 tonnes of organic household waste such as fruit and vegetable peels and leaves generated in Indore city. The biogas will help operate 400 city buses every day from May.

Work is now being done on similar projects across the country, Modi said. "In the coming two years, work is being done on setting up such Govardhan Bio-CNG plants in 75 big municipal bodies of the country," he said.

"There are two ways to tackle any challenge. The first way is to address that challenge immediately. The second is to deal with that challenge in such a way that everyone gets a permanent solution," the PM said in his virtual address. "The schemes made by our government in the last seven years are supposed to give permanent solutions."

"Millions of tonnes of garbage have been engulfing thousands of acres of similar land for decades in cities across the country. It is also a major reason for the diseases caused by air and water pollution," he said. "Therefore, work is being done to deal with this problem in the second phase of the Swachh Bharat Mission."

"This plant has been built by a Delhi-based company for ₹150 crore," said Madhya Pradesh chief minister Shivraj Sigh Chouhan, who attended the programme. "In the first phase, 55 CNG buses will start running this month. After this plant, the municipal corporation's expenditure of ₹100 crore on wet waste disposal will be saved."

As a result of this initiative, the air quality of Indore will improve to a great extent, which will lead to carbon credits, he said. The municipality stands to earn substantially b y selling the credits in the international market. Additionally, 100kg of organic manure will be produced in the plant, the CM said.

The PM also lauded the efforts of sanitation workers to keep India's cities clean.

<u>Source:</u> https://www.hindustantimes.com/india-news/modi-unveils-india-s-largest-bio-cng-plant-101645294491278.html\_\_\_\_\_\_End