



Vidya Vikas Education Trust's
Universal College of Engineering
Kaman - Bhiwandi Road, Vasai, Maharashtra
Accredited with 'B+' grade by NAAC, approved by AICTE, DTE
Recognised as Gujrati Linguistic Minority

CURRENT WAVES

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College Profile

Everything you need to know about us.

Embraced by lush greenery and scenic beauty, Universal College of Engineering is a treasured place for aspiring engineers to leave their imprints towards success.

As a college within the wider network frame, we are one of the fastest growing institutions in India. Our institute has been accredited by National Assessment and Accreditation Council (NAAC) with **B+ grade** in the first cycle of accreditation. Times of India Survey **Ranked No. 1** in India among Top Emerging Private Engineering Institutes for 5 consecutive years 2015, 2016, 2017, 2018 and 2019 and the saga of accolades still continues.

In response to the expectations of quality technical education, our college is approved by the All India Council for Technical Education (AICTE), New Delhi; recognized by the Directorate of Technical Education (DTE), Government of Maharashtra; affiliated to Mumbai University.

Our college is also associated with professional bodies like IEEE, IETE, ISA and CSI to update the revolutionary technological advancements.

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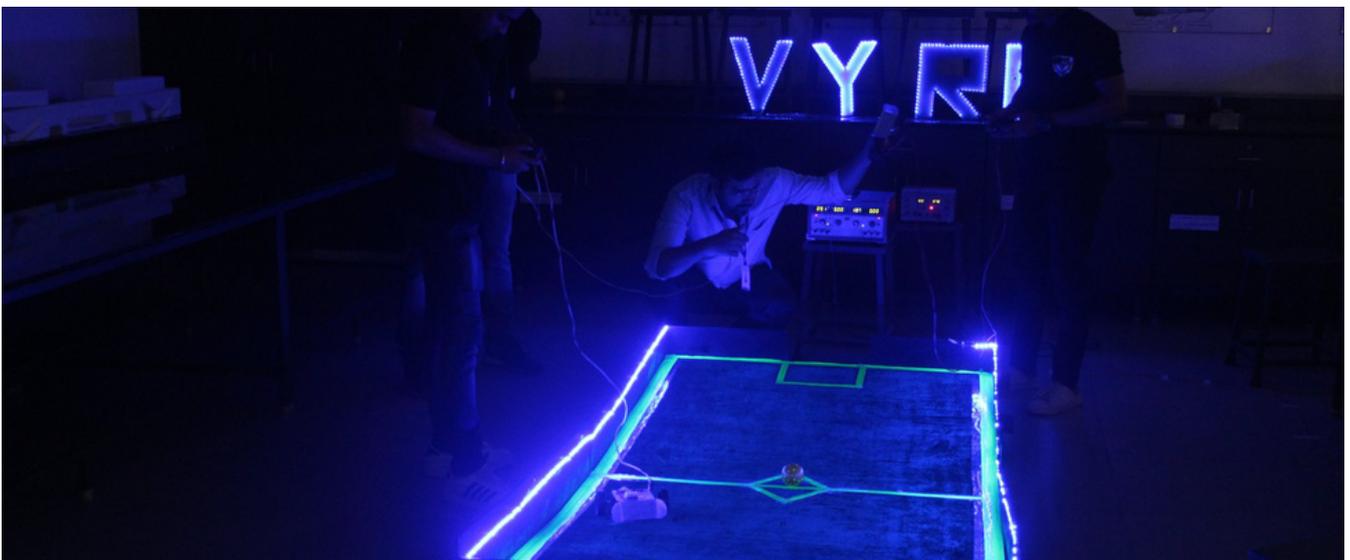
We offer 4 years full-time Bachelor of Technology in Computer Engineering, Civil Engineering, Artificial Intelligence & Machine Learning, Information Technology Engineering and Data Engineering.

The unique state-of-the-art facility of the institute has been carefully designed to accommodate the needs of the students. Laboratories are equipped with world-class facilities based on the latest technology of different sectors. Our smart classrooms are well ventilated, spacious and equipped with overhead and LCD projectors along with the public address system. College library provides a rich collection of specialist library resources and services to support students' academic work and enrich their research skills.



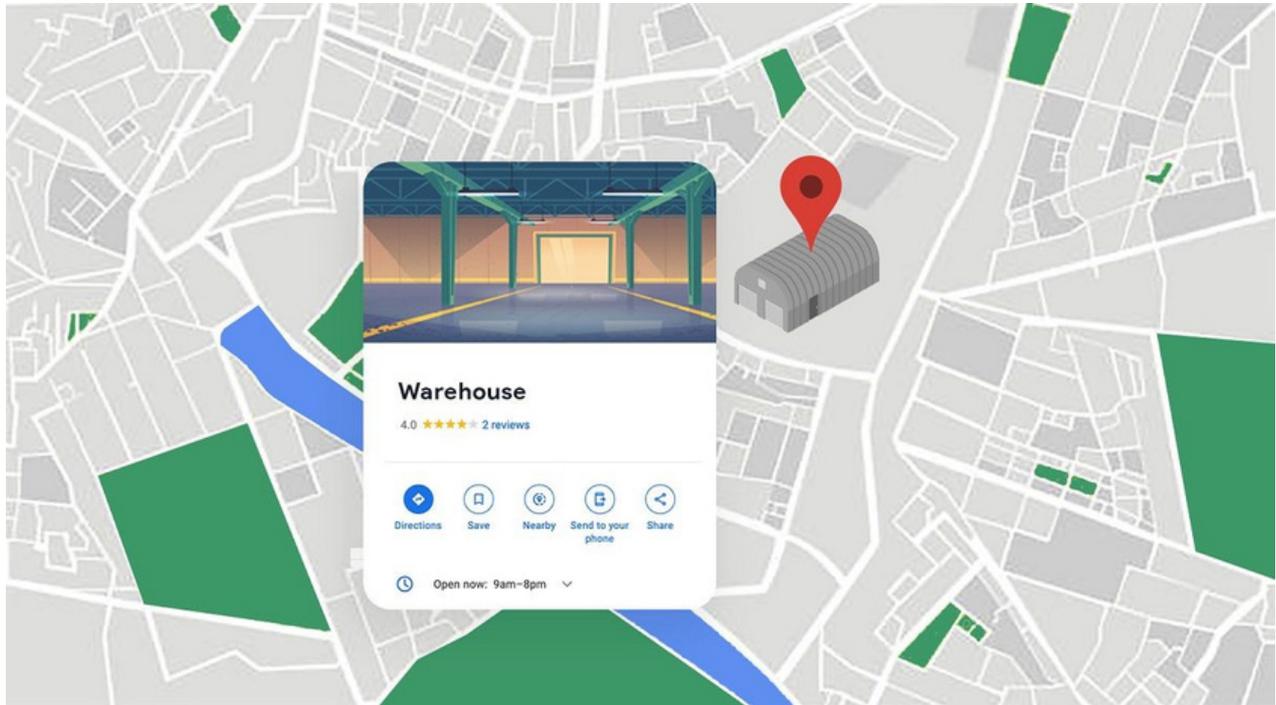
We are obliged to equip our students to get placed in highly reputed companies by mentoring their necessary skill set for cutting-edge technologies. The core highlighted areas are helping students with their technical competency, communication skills along with career guidance and counselling.

Universal College of Engineering has produced a large number of successful alumni who are working in reputed organisations in India and abroad and have contributed immensely to the cause of nation-building and society. We welcome all engineering aspirants to create an incredible legacy in the field of engineering.



Geotagging Warehouses

In this newsletter we talk about the government's ambitious plan to solve India's storage problem.



Policy

The Story

Indian farmers have a big problem. They grow their crops. They harvest their produce, only to then find out that storage is going to be a problem. They don't have the money to build their own infrastructure. And they can't get access to third party warehouses. And no, it's not always because there is no infrastructure. Sometimes it's because most farmers simply don't know where to go. Meaning, even if there is a depot with a lot of empty space, they probably have no way of accessing information regarding this facility. And when they can't find storage, they are often forced to part with their produce for

pennies on the block. This is true for farmers desperately seeking warehouses. It's also true for those who are looking to access cold storage units. It's a story that's all too familiar for most farmers across India.

And in a bid to alleviate some of their troubles, the government has a new ambitious plan. They want to start geotagging warehouses. Not just warehouses, but also cold storage facilities and refrigerated vans all across India. The objective of geotagging is rather simple.

You survey every single storage facility in India, locate them on a map, upload the information to a central database and

hopefully, make this information available to every individual that has access to the database. Maybe you could map more details about these facilities. But at the end of it all, farmers should be able to access it. As the NABARD chairman, G.R. Chintala told ThePrint in an interview last year.

“The idea is that a farmer should be able to locate a warehouse or cold storage unit in the 10 km vicinity to store their produce. They can store the product and get a warehouse receipt credit. This will help in stopping distress sale by farmers and help them get the right price for their produce.”

More importantly, this ties well into the government’s plan of amending the Essential Commodities Act (ECA). For the uninitiated, the state has long aspired to keep food prices in line with the help of the ECA. This law allowed the government to moderate the supply & storage of certain essential commodities (like pulses, onions, fruits, and vegetables) by imposing stocking limits. Meaning, the government could force traders to immediately dump supplies if they were suspected of hoarding. Or in most cases, if the government sensed prices were on the rise. And while you could argue that it did curb hoarding to a certain degree it also prevented people from investing in building storage infrastructure.

As we wrote in one of our newsletters last year—

Imagine you are a wholesale trader stockpiling 100 tons of tomatoes. Unbeknownst to you, the price of tomatoes starts inching upwards. There’s discontent among urban consumers. Protestors start trickling in. The government is alarmed. It’s desperate to

halt the march of pricey tomatoes. It believes greedy agri-commodity traders are hoarding excess supplies to artificially inflate prices. So it draws a line—any wholesale trader holding more than 50 tons of tomatoes will be prosecuted if he doesn’t comply with the state diktat.

The government is hoping that once you sell the excess tomatoes (beyond the stocking limit), the added supply in the market will help rein in prices. But this disincentivizes private institutions from building storage facilities since they could be asked to part with their supplies any day. One day you have a warehouse with stockpiles totaling 100 tonnes. The next, you have a half-empty facility. It doesn’t make a lot of business sense.

So the government decided to dilute the ECA. And as it stands, the state cannot arbitrarily decide to impose stocking limits. Meaning, private institutions can build warehouses and they can stock any agri-commodity they want. But what if they actually do start hoarding? What if they try to artificially tip the scales of demand and supply? How are you going to penalize these people?

Well, one argument goes something like this—“If all government-owned warehouses are included in the database and farmers can access them through an app, maybe private entities will also join in on the program. And considering most of these private facilities are already geotagged, the only thing left to do is integrate them with the central database. If that happens, the government could theoretically track the real-time movement of commodities. And maybe, the government could tell if someone ought to be penalized for hoarding.

Maybe.”

Why are petrol and diesel prices on the rise?

Global crude oil prices are increasing, the taxes are crippling us and the government has no recourse. That's the story. But if you still want the long version, here goes...



Economy

The story

Petrol and Diesel prices have been on the rise once again. The price of a litre of Petrol breached the Rs.100 mark yesterday in Rajasthan. Elsewhere in the country, it's the same story, albeit not as drastic. And it's upsetting a lot of people. Including the Prime Minister, who recently lamented about India's dependency on foreign oil.

And while you might be tempted to think this explanation is self-sufficient, it doesn't fully explain what's happening right now. True, India is most certainly dependent on foreign oil. And back in 2015, the government had outlined plans to reduce India's import dependency — from 77% in 2013–2014 to 67% by 2022.

But things haven't exactly worked out for us. Domestic production hasn't really picked off and India's energy needs have been on a perpetual rise. In fact, India's import dependency stood at 83% in 2018–19. Not exactly the kind of improvements you like to see.

But that's not the major concern right now. Globally, oil prices have been trending downwards for the past couple of years. And yet, we haven't seen the benefits trickle down to end consumers. For instance, global crude oil prices had plummeted to \$19 per barrel from the highs of \$66 per barrel in early 2020. At this point in time, many people were hoping that oil prices at retail stores would fall in line.

But it didn't.

Because the central government saw an opportunity to make some money here. After all, tax collections were abysmal. They were already borrowing too much. And they were desperately looking to fund their expenditure through any means necessary. So the central government increased excise by a record ₹10 per litre on petrol and ₹13 per litre on diesel, planning to raise a cool ₹1.6 lakh crores. States meanwhile got in on the act as well. They bumped up taxes in tandem and together these extra charges alone make up 55–60% of the final retail price today.

And look, this wasn't a problem so long as global prices remained modest.

But the global landscape is changing. Oil-producing nations are cutting supply. They're limiting production in a bid to push prices higher. And while you could be angry at them for doing this at such a tumultuous time, you have to remember—They are looking after their own interests. Oil-based economies have only one recourse when their economy is in the doldrums—Oil. And if prices don't firm up, they'll be in a soup. So you should expect them to keep this up unless something drastic happens. And as it stands, crude prices (Indian basket) are now flirting at levels close to \$60.

Now, this is where things get interesting. Every time we see a rise in global crude prices, one of two things may transpire. You might see a proportionate increase in prices or you might see prices remain flat. Sometimes, the Oil Marketing Companies—the likes of IOCL, BPCL, etc will absorb the price increase. They'll take the hit on their margins and sell you petrol and diesel at a reasonable price.

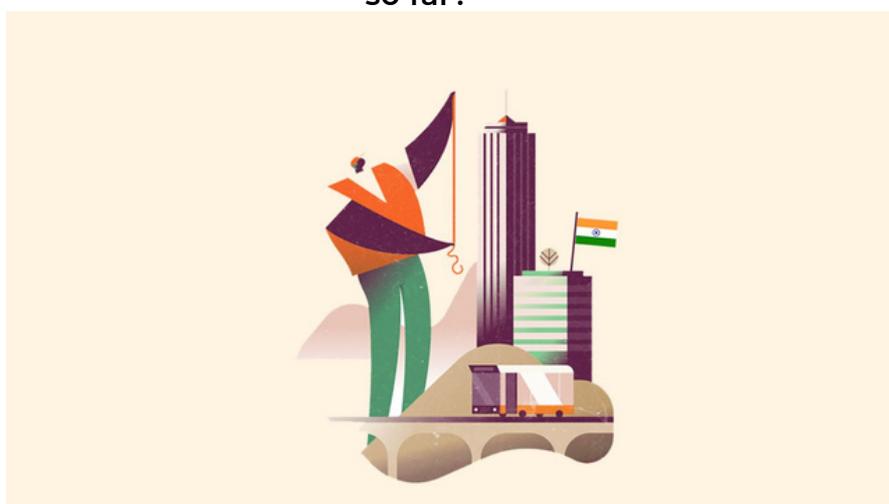
Other times, the government might decide to cut the taxes. Once again, you'll get some respite. But most times, the cost increase will simply be passed on to you—the consumer.

So to summarize, here's what has happened in the past year or so. When oil prices tanked, both state and central government bumped up the taxes. Granted, they were doing this in a bid to shore up revenues. But the increase in taxes meant consumers saw little to no benefit. Afterward, when the global price of crude started inching upwards, they refused to cut the taxes and you're now witnessing the implications of this decision. Ergo, prices will increase until somebody in the value chain decides to take one for the team. And right now, it's you who's taking one for the team.

What are we really “making” in India?

Some days ago Chinese smartphone maker Xiaomi announced that it was opening two new mobile manufacturing plants in India after partnering with BYD and DBG India. And if you don't know who they are, here's an excerpt from an article in Tech Crunch to help you out—“BYD is China's largest electric carmaker with a long history of making electronics parts, while DBG has been a major supplier to Chinese telecom firms including Huawei.”

Both vendors will be manufacturing in India. And it seems as if Chinese smartphone makers are increasingly looking to source and produce parts locally. But the real questions still remain—“What are we really making in India and how's the progress been so far?”



Business

The story

Now, everybody knows the original plan back in 2015 was to induce manufacturers into sourcing and producing parts locally. And while you could achieve this objective in many ways, the government opted to go down a familiar route—imposing tariffs. Think about it. If you could make it more expensive for manufacturers to import certain parts, they'll probably start considering manufacturing in India. But if you overdo it, you could risk alienating them altogether. You can't just wake up one day and ask them to start manufacturing complex electronic parts overnight. That will achieve nothing. Manufacturers will continue to import, despite having to pay a higher customs

duty and simply pass on the cost to end consumers. So the government had to strike a balance. And they decided to do this by adopting a phased approach. They even called it the phased manufacturing program for this very reason. As the government put it, the objective here was “...progressively increasing the domestic value addition for the establishment of robust Cellular mobile handsets manufacturing ecosystem in India.”

So between 2015 and 2020, the government planned to introduce a basic customs duty on new items each year. They started with finished handsets and by the end of 2015, many companies were already assembling mobile phones in India (Testing and packaging included).

Then they imposed a duty on chargers and handsets. Some companies started manufacturing locally, but the competition was intense. For many players, it was still cheaper to import these parts from outside India and so this plan didn't really take off. In 2017 the government imposed tariffs on things like battery covers, mic, speakers, and USB cables. Once again, adoption was patchy at best. Most manufacturers simply did not want to invest the kind of money to manufacture these things locally and nothing changed here.

Then there was the imposition of the customs duty on printed circuit boards (PCBs). And miraculously that took off. But before you get too ahead of yourself, do note that we only assemble the PCBs here. The actual manufacturing still happens abroad. So we have a lot of work to do on this front. But the government intended to take the program ahead and was just about to impose tariffs on the assembly of display and touch parts in 2019. However, after some lobbying from industry participants, the government put that plan on hold. So as it stands, the country manufactures a lot of low-value items and assembles some high-value items in India. But when it comes to manufacturing high-value items—Things like PCBs, speakers, mics, touch panels, etc, we are still lagging.

So what does one do about this?

Well, for starters you can see why so many people are pinning their hopes on the PLI (Production Linked Incentive) scheme.

Instead of imposing a tariff on importing items, maybe it would make more sense for the government to offer financial support to manufacturers who produce handsets, diodes, transistors, resistors, sensors, transducers, Printed Circuit Boards (PCB) locally. So the fact that the government has set aside 41,000 crores for manufacturers to make a dent on this front, should be reassuring to a certain degree.

Secondly, vendors and suppliers that produce these high-value items won't move to India unless the likes of Xiaomi nudge them. This is why it's also reassuring to see that Chinese smartphone makers are increasingly partnering with companies to "Make in India."



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