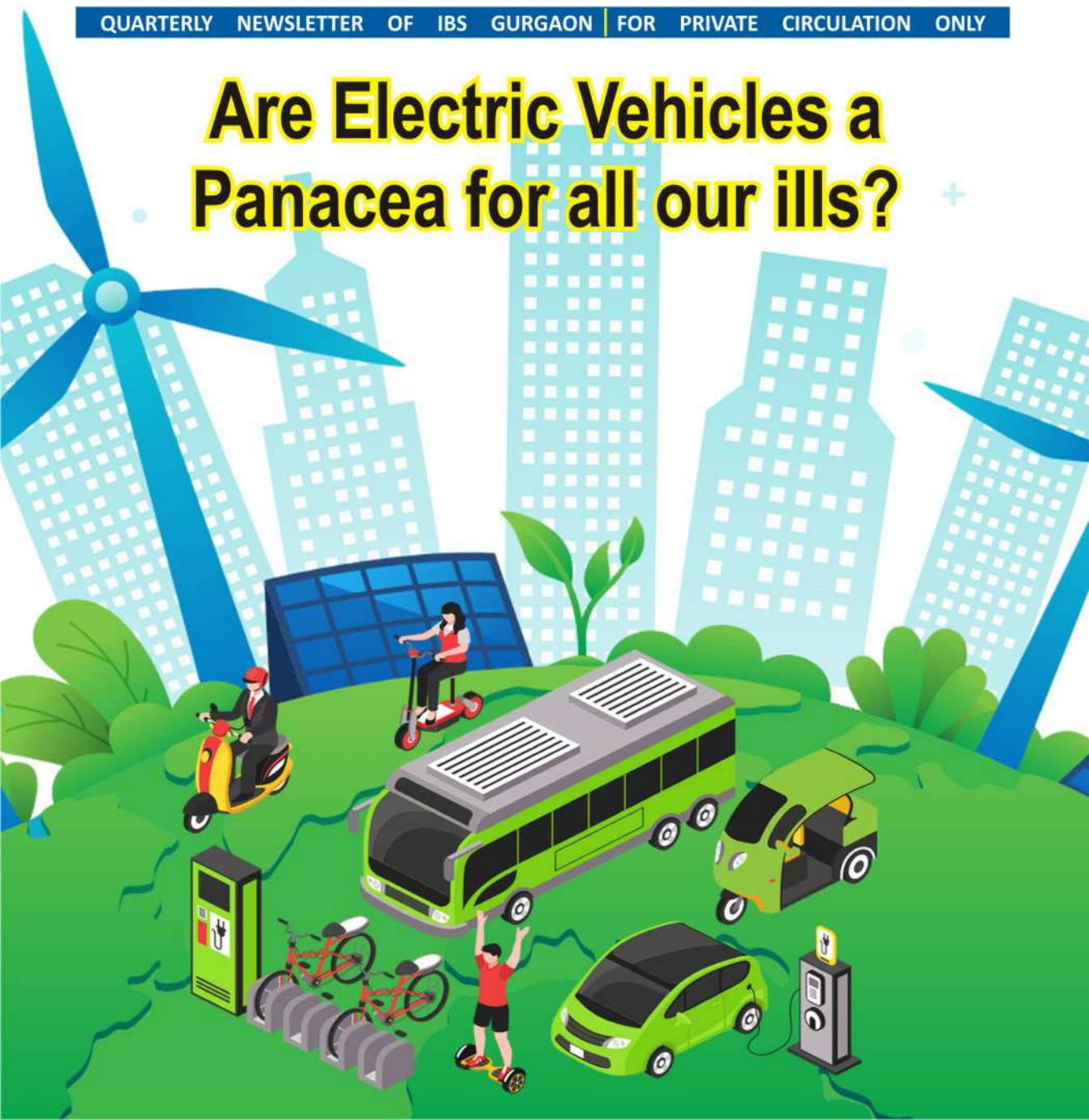


RAMVAAQ

QUARTERLY NEWSLETTER OF IBS GURGAON | FOR PRIVATE CIRCULATION ONLY

Are Electric Vehicles a Panacea for all our ills?





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Transportation accounts for nearly 23 percent of energy-related carbon dioxide emissions. Mass switch over from traditional vehicles which run on diesel and petrol to Electric Vehicles will be a revolutionary step in the automobile sector. Its economic and geopolitical implications are far-reaching. It will go a long way in preventing climatic catastrophe seen today, around the world, in the form of wide spread forest fires, rising temperatures, consequent floods, irreparable damage to fertile soil & natural life, pollution-related diseases like cancer, respiratory disorders and many more, particularly in metropolitan and large urban centers.

Such a transition is extremely relevant for the Indian Economy, given the dynamism of the automobile sector in terms of its employment potential and high multiplier value. Side by side, its massive dependence on imported crude oil, ballooning foreign exchange requirements to support the import of crude oil and growing uncertainty surrounding global economic order are some of the challenging dimensions of the current scene. India's dream of becoming a global economic power in the coming years and decades strategically hinges on the availability of assured sources of energy and the pace at which the goods and services, along with the workforce, could be moved across geographies efficiently, economically and safely.

It is in the above context that the induction of electric vehicles – buses, trucks, trawlers, cars and two-wheelers needs to be viewed. The expected benefits are enormous but equally formidable are the challenges to be overcome. Initially, the entire eco – system of automobile sector would need to be overhauled both from supply side and demand side, for business units and for retail customers. This would, inter-alia include setting up of electricity charging facilities in diverse locations and making the service affordable and fast.

Furthermore, the cost of production of electric vehicles particularly the battery and related components has to be brought down to make them affordable and popular. Government and automobile companies will have to work together to achieve this goal, the former by keeping the taxes low and the latter by keeping minimum profit margins.

Lastly, the safety standards and practices have to be stabilized to instill confidence in the customers. Customer training/counseling centers would need to be setup.

This transition from traditional fuel-dependent vehicles to EVs is not possible without strong and continuous support from the government. In this background, the Government of India introduced in May 2021 a production-linked incentive scheme (PLI) for ACC battery storage manufacturing. This is aimed at supporting the domestic production of such batteries to reduce the dependence on imports. A few months later, the government expanded the scope of incentives provided to include high value advanced automotive technology vehicles and products, including green automotive manufacturing. This scheme is applicable to the existing automotive companies and the new investors in the automobile or auto component manufacturing business. The automobile and auto component manufacturing business sector is entitled to a hundred percent foreign direct investment in order to augment production capacity in the country. The scheme of providing capital subsidy for the installation of EV charging stations has also been in place for some time. Most state governments have also decided to support EVs and are providing several types of incentives such as financial subsidies on the purchase of EVs, waiving off road tax, vehicle registration fee, loans on subsidized interest rate etc.

All things considered, EV technology is going to be a pace-setter in the mobility sector.

Happy Reading Samvaad!!

Prof. S. C. Sharma
Senior Director, IBS Gurgaon

FROM THE MANAGING EDITOR'S DESK



The present theme of Samvaad is 'Are Electric Vehicles a Panacea for all our ills'? Air pollution has always been one of the major concerns for India and it still is, as per the report of Climate Risk Index 2020, India is ranked as the 5th most polluted country in the world. Everyone out of the 30 most polluted cities in the world is an Indian city. The situation is alarming, therefore, the trend of adopting electric vehicles is buzzing in the world. Electric mobility in transportation will bring out the most promising solution to save the Earth from carbon emissions, pollution and global warming. It is significant to know that electric vehicle mobility will help to reduce the overall pollution in India. It will substantially bring down the dependability of crude oil products such as petrol and diesel which is around 80 percent.

The Government of India is targeting to have 30 percent of private vehicles, 70 percent of commercial, 40 percent of buses and 80 percent of two-wheelers in the country as stated by Union Transport Minister Nitin Gadkari by 2030. The schemes to boost this target includes various subsidies, battery swap policy, reduction in GST, etc.

For India, it could be a leapfrog bid to reduce transport and carbon emissions. Out of the total global electricity production, 38 percent of global electricity consumption comes from coal and in India, it is 80 percent therefore, there is a dearth in the production of cleaner energy and renewable resources. Further, it is significant to note that the technological innovations in green transportation cover a wide spectrum, i.e. from fuels to the vehicles themselves. Biofuels, hydrogen and solar power are some of the options as far as clean fuels are concerned, provided that the electricity and hydrogen are generated in a manner that is environmentally friendly. There is also a lot of focus on the design of vehicles-whether personal or commercial-through better aerodynamics and engine efficiencies resulting in lower emission levels. In addition to these, there are other ways to minimize transport-related environmental impacts that too merit equal attention. For instance, how the traffic is managed in a city has a huge bearing on emission levels. Traffic jams, frequent stopping of vehicles and excessive idling of engines all contribute to this problem immensely. Fortunately, all of these factors whether pertaining to behavior or technology or regulation or management are not mutually exclusive and hence must be pursued simultaneously.

The future of Electric Vehicles looks very promising, barring a few obstacles, especially in the case of India, where certain steps are required in order to have full potential of Electric Vehicles and head towards a cleaner and greener environment. Let's hope to see a transition that will help reduce the carbon footprint on the earth and work towards sustainable development.

This issue of Samvaad covers many academic and extracurricular events organized by IBS Gurgaon during this quarter. My heartfelt thanks to all those who have contributed to the July publication of Samvaad. I am thankful to the Editorial team, Faculty Members, Alumni and Information Team for their valuable contribution. My special thanks to the Student team of Samvaad Cell. Heartfelt thanks to the Samvaad Students team, the Class of 2023 & the Class of 2024 for all the hard work they have shown to bring out Samvaad in a succinct manner.

*Readers, I am sure you will find the theme informative.
Happy Reading Samvaad !!
For any kind of feedback or suggestions for Samvaad,
please contact at bhavna.chhabra@ibsindia.org*

Dr. Bhavna Chhabra
Managing Editor, Samvaad

FUTURE OF MOBILITY: ELECTRIC VEHICLES



Prof. Navneet Saxena

Associate Editor, Samvaad

The future of mobility is being driven by three main advanced technology-led disruptive trends: electric vehicles, connected & autonomous vehicles and Mobility-as-a-Service. Transport is a basic need of modern life, but the old combustion engine is quickly becoming out of fashion. Various government incentives are being provided for creating an infrastructure for electric vehicles. Registration fees and road tax on purchasing electric vehicles are lesser than petrol and diesel vehicles. There are three primary areas where one can invest and build products around electric vehicles - Mobility, Infrastructure and Energy. Mobility is the segment where the actual increase of vehicles on the road will take place. India needs to have a strong infrastructure network for charging across the corners of the country which incorporates the requirements of traffic and population density. The energy segment looks at charging vehicles and storing energy in the form of batteries to run the vehicles. This requires national and state level policy making which will enable standardisation of resources and replication of international best practices on policies. While the emerging firms continue to face a daunting task of challenging the might of traditional firms, but they are increasingly making their presence felt in uncharted territory. Their use of artificial intelligence, analytics, and machine learning has put them in a superior position as compared to their petrol and diesel counterparts.

FACULTY ARTICLES

Adoption of Electric Cars in India



Prof. Vineeta Jha

Faculty, IBS Gurgaon

Automobile manufacturers in India are giving preference to electric vehicles (EV) over hybrid, of late Hyundai, Tata Motors, Mahindra & Mahindra, Suzuki etc are foremost in the race to roll out electric cars soon. There is a strong push for the segment, with the government playing an active role in heavy electrification, especially in the public transport space, with three-wheelers and buses and government purchases for passenger vehicles. Even though the drive to replace polluting petrol and diesel cars with a new sort of electric vehicle has gathered momentum in recent weeks. Almost all car manufacturers do have electric car platforms ready and since EVs have a smaller number of moving parts car platforms ready and since, building them once the production lines are in place

could actually be easier compared to fossil fuel-powered cars. Two major factors driving the trend for higher penetration of EVs are steep reduction in the battery technology costs and decarbonization policies introduced by different economies of the world. The achievement of electric cars in India depends on a domino effect. If the charging network expands, more people will be willing to buy electric cars. If the demand increases, manufacturers can invest in the production of EVs and simultaneously, the government needs to go easy on taxing such cars, to offer the all-important motivation. Encouraging tie ups between carmakers and recyclers needs to be formulated simultaneously. In the current scenario, the Indian electric car scene is quite barren. Major challenge of the auto industry has been to give shape to a futuristic plan of action with full participation of the stakeholders. Besides making intensive efforts for removal of obstacles for accelerated growth, the prime need is to put in place required infrastructure to facilitate growth and suitably train and modify the labor laws to facilitate availability of quality manpower. Contribution of the auto industry to the India growth, technological maturity, global footprints, and competitiveness will be the main drivers in the coming decade. The evolution of the automotive ecosystem including the glide path of specific regulations and policies that govern research, design, technology testing, manufacturing, import/export and recycling of vehicles are gaining primacy.



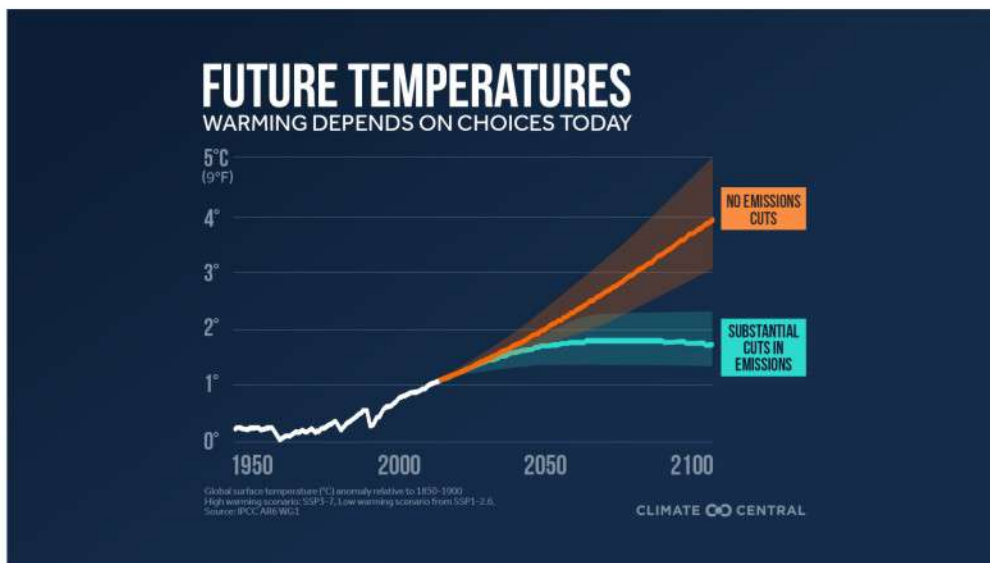
Prof. Umesh Kalra
Faculty, IBS Gurgaon

Future of Mobility: The Electric Vehicles

".... the time is right for electric cars - in fact the time is critical..." Carlos Ghosn
"...in order to have clean air in cities, you have to go electric..." Elon Musk

1. It will be appropriate to begin with the recent 6th Assessment Report of Intergovernmental Panel on Climate Change (IPCC) of United Nations, a body responsible for sharing knowledge on human induced climate change. It has warned that over 3.5 billion people or 45% of the global population was living in areas highly vulnerable to climate change. It identifies India as one of the vulnerable hotspots with several regions and important cities facing very high risk of climate disasters such as flooding, sea level rise and heat waves. It has specifically mentioned about Mumbai which is at high risk of sea level rise and flooding while Ahmedabad faces the danger of heat waves. The following graph by IPCC cautions the world on the future warming.

FUTURE TEMPERATURES – WARMING DEPENDS ON CHOICES TODAY



Source: Intergovernmental Panel on Climate Change (IPCC), 6th assessment report-physical science basis/climate matters

2. The above two quotes made by the popular thinkers are very apt and thought provoking. The clean air is increasingly becoming a scarce commodity now a days. Take the case of India. According to the 2020 World Air Quality Report, 22 Indian cities are among the 30 most polluted cities in the world, with transportation being the primary source causing lung and respiratory problems. The average rate of new vehicle registration in India is 17% and expected to increase with rapid urbanization. The transport sector accounts for 18% of total energy consumption the major part of which is met through the import of crude oil.

3. If the current demand of energy consumption continues, by 2030, India would require an estimated 200 million tons of oil. In view of the insurmountable amount of pollution it generates, the dependency on imports and the limited world crude stock alternative sources/resources are to be looked into. Over and above, the world crude oil market is always vulnerable to international situations (like the present Ukraine crisis).

4. India is committed to reducing its carbon emissions level by 33-35 percent by 2030 as agreed by Nationally Determined Contributions (NDC), United Nations Framework Convention on Climate Change (UNFCCC) agreement in Paris. The urgent need of the hour, to start with, is to adopt the environment-friendly and suitable substitute of fossil fuel transportation which could be coupled with rapid economic growth, rising urbanization. Electric mobility presents a viable alternative in addressing these challenges. The potential for growth in India is immense as electric vehicles comprise only 0.085% of the 80 million registered vehicles.

5. The government of India is indeed concerned and therefore, initiated way back multiple initiatives to promote manufacturing and adoption of electric vehicles in India. In 2012, the “National Electric Mobility Mission Plan (NEMMP) 2020” under which the first phase of FAME (Faster Adoption and Manufacturing of Hybrid and EV) was implemented in April 2015 and extended till March 31, 2019. FAME II was implemented from April 1, 2019 for 3 years. FAME is primarily a demand side incentive scheme with a focus on technology development, infrastructure creation, and boosting demand through subsidies and pilot projects. Electric and hybrid technologies, are covered under this policy. This policy also plans to set up about 2,700 charging stations in the largest cities, other cities with over a million in population, smart cities, and cities in hilly states across the country. Over 14 of India's 28 states have already finalized or are in the process of finalizing electric vehicle policies under NEMMP, which is a positive development.

6. However, as a step towards meeting Paris Agreement targets, electric vehicles should reach 30% for private cars, 70% for commercial cars, 40% for buses and 80% for two and three wheelers by 2030, according to a report of the Government of India. As an indication of encouragement, in April, 2021, 38 manufacturers have registered 114 models with the Department of Heavy Industry, Ministry of Commerce and Industry. Around 69,500 electric vehicles have already been sold in India, though it represents only a small fraction of the number of vehicles sold and most of these are two or three-wheeled vehicles. Tata and Mahindra and Mahindra are coming out with these new concepts and many more are in the beeline.

7. The start has been made. The above policies, if combined with improved infrastructure and competitive prices, will definitely lead to acceptance of this mode by the populace. It will be a big step not only in the direction of cleansing the environment but also attracting foreign capital, employment generation and saving on foreign exchange by reducing import of crude oil.

Electric Vehicles: Are We Ready Yet?



Dr. Shalini Khandelwal
Faculty, IBS Gurgaon

Electric Vehicles (EVs) are the flavor of Motown and their penetration is moving fast to replace the Internal Combustion Engine (ICE) vehicles in the times to come. We often discuss the huge advantages with the adoption of EVs and how they are shaping up the future of mobility across the globe. However, only 1.8% of Indian population has adopted EV till 2020-21 and according to industry analysts, it may take another 15-20 years before EVs will take over in a sustainable environmental friendly way in India.

EVs seem to be environment friendly as they are recharged by electricity and do not pollute the environment/place of use with vehicular emissions. However, developing countries like India have a heavy dependence on fossil fuels for meeting the electricity demand. In future, more EV spread will trigger further rise in electricity demand. If we go by India's projected electricity demand growth v/s future additions in new power plants, India would be requiring more thermal power plants (coal based) despite exceptional government support for Solar/Wind Power Generation. Thus, increased adoption of

EV and electricity demand would result in more pollution as by-products generated by coal based Thermal Power plants.

EV battery technology is still evolving and is presently largely dependent on lithium ores. Lithium ore is limited and not available to all at will. India is not blessed with Lithium ore reserves, so dependence on imports will continue until a suitable alternative is implemented.

Many fire cases in EVs are being reported across the globe, indicating that this technology is yet to reach maturity. Performance of EV Batteries also goes down sharply in extreme ambient temperature conditions. Therefore, in cold regions like Uttarakhand and Meghalaya and hot regions like Rajasthan, Gujrat, EV battery performance may be low and rapid charging would be required. Moreover, in an EV, 60% cost is of battery itself which needs to be replaced in 7-8 years. However, the silver lining is that running and maintenance cost are much lower for EV vehicles. One of the biggest puzzle that environmentalists are trying to solve is the environmental friendly disposal of EV Batteries on a large scale.

Charging infrastructure is also one of the biggest challenge. In a country like India spreading more than 2500 kms in length and breadth, developing such a vast network is a humongous task. Further, different EV companies use different charging ports which becomes a hurdle in setting up a proper charging ecosystem. This lack of standardization has also affected the EV adoption rate in society-based communities. GOI is swiftly moving to establish common standards for EV and charging Infrastructure.

A lot of developments across the globe have taken place in the direction of adopting renewable sources of energy like solar energy, wind energy, tidal energy for ensuring long term sustainability. It is also important that governments make further efforts to develop local solutions for their mobility energy requirements. India, with a vast resource of agriculture products and by-products, needs to strengthen Bio CNG/Ethanol based mobility solutions which are environment friendly and will contribute to lowering our precious forex outflow. Green Hydrogen production clubbed with renewable electricity can be the long term mobility solution for a country like India where Solar power is available in abundance. In order to realize the advantages of EV technology, we need to shift to large scale and efficient deployment of renewable sources of energy for electricity generation. Until then, the future of mobility through EV route needs to be deliberated carefully taking all aspects into consideration.

The Wonder of the EV: Is There a Down Side?



Prof Jean Saldanha
Faculty, IBS Gurgaon

While we rave about the wonders of the electric vehicle and buyers are waiting in the wings for their ideal model to emerge in the market, there is much to be read about how positively this shift is going to save the environment from the burning of fossil fuels.

But are EVs as environment friendly as we would like to believe? The fact that EV do not emit tailpipe pollutants does not necessarily mean that they are. The market for lithium-ion batteries, which power the EV, is expected to grow from US\$ 30 billion in 2017 to US\$ 100 billion in 2025. Extraction of lithium and cobalt requires a tremendous amount of energy and water. About one third of the lithium supplied, comes from Argentina, Chile and Bolivia (the Lithium Triangle), all somewhat arid countries, which can hardly afford to waste any water. One ton of lithium extraction requires around 500,000 gallons of water. The availability of cobalt, an essential part of the battery's electrode, is highest in the Democratic Republic of Congo (about 70% of the world's supply). Unsafe work practices and rampant use of child labour is known to prevail in this region due to the sudden burst in demand. The horizontal mining process through which nickel is extracted from the topsoil in rainforests in Indonesia and the Philippines is known to cause extensive environmental degradation.

The lithium battery used in the EV contains nickel, copper and lead materials, which if not disposed off properly when the battery life is over, could become explosive and also cause devastating damage to the soil. The US Environment Protection Agency reported that in the past year, there were 65 landfill fires caused by waste lithium batteries. Municipal waste facilities are not yet geared to collect this type of waste.

The true cost of alternative energy sources needs to be assessed with a commitment to do what the Earth really needs as a long term solution to environmental pollution.

Future of Mobility: The Electric Vehicles



Prof. Shweta Sikoria
Faculty, IBS Gurgaon

Consumers cringing about the rising fuel prices, the environmentalists talking about green planet, innumerable discussions, researches and conferences on different trends and technologies only directs to a human innate desire to live and sustain better on our humble yet powerful planet.

Technology is magic if used in the right direction and for the right purpose. We humans are just a spec of soil in the universe; Earth to Mars nothing is left to imagination much. Thanks to our scientists (may be the better way to address them as revolutionaries, now)

We have our own daily quest of quenching thirst, whether it's in the form of finding a source of happiness, finding a solution to our problems and even to foray into an unknown territory. We hardly stop.

Hence, given the demeanour of the mere mortals, the need of the hour is to improve the way we live (not forgetting to fulfil our basic needs first). One such area is to venture into a zone that would accelerate our mobility further. Electric Vehicles from being a coffee table discussion to almost disrupting the market, Electric mobility cannot be eluded further. Electric vehicles (EVs) are gaining momentum and the very putative reason is that it is considered as a solution to the energy crisis. Also, consumer behavior plays an important role as people have become more aware of sustainable mobility modes. Hence, we see the emerging technologies for future application that includes batteries, charging technology and charging infrastructure. However, all of these don't come without any challenges. The customer will only feel satisfied when the value in terms of price, performance, durability of the vehicle, the running cost, charging infrastructure and the battery replacement when required, are met. Hence, the entire ecosystem from government policies to manufacturers and dealers needs to focus working on a common goal if the EVs have to be made a successful foray.

According to an article from McKinsey (Why the automotive future is electric), "mainstream EVs will transform the automotive industry and help decarbonize the planet." Mr. Naveen Munjal, Managing Director of Hero Electric, our country being a very large two-wheeler market, thinks two wheelers EV market will explode because of various factors which includes lucrative policies by the Central and State government which are pushing Electric mobility through. However, different segments (two wheelers, three wheelers, four wheelers, public transport and commercial vehicles) need unique solutions.

What's interesting is world is changing around us. Not only in movies but also in reality Electric Vehicles may become a common sight in the near future or we may ride one too!

Why is Tesla successful?



Prof. Abdul Aziz
Faculty, IBS Gurgaon

A major disruption in the automobile industry is switch to battery driven cars from internal combustion engines first patented in 1886 by Karl Benz. Internal combustion engines fueled by petrol or diesel produce greenhouse gas emissions and low-quality urban air. Plugin Hybrid Electric Vehicles (PHEV) to Battery Electric Vehicle (BEV) engines are the answer to this problem.

Until Tesla arrived the electronic vehicle (EV) market has been boring. Tesla focused also on the features of the car. It proved that a Luxury Electric Sports Car is possible.

Reasons for success of Tesla are:

- ▶ **Technology:** Its ability to integrate many components into one great product, the (2013) Tesla Model S sedan.
- ▶ **Timing:** Tesla secured a half-billion-dollar loan from the US Government just before it stopped cleantech subsidies.
- ▶ **Monopoly:** Tesla started with a tiny submarket it could dominate high-end electric sports cars. It then moved into the luxury electric sedan market and is positioned to continue expanding into broader markets.
- ▶ **Distribution:** Tesla decided to own the distribution chain. It sells and services its cars in its own stores. This gives it control over the customer experience, strengthens its brand, and saves money in the long run.
- ▶ **Secrets:** Tesla realized that while rich people wanted to look green by buying an electric car, they' rather look green and cool at the same time.

Adoption of EVs and Impediments in e-mobility



Prof. Richa Bhargava
Faculty, IBS Gurgaon

The Government of India had set forth an electric car revolution in 2017. The aim was 100% shift to Electric Vehicles (EVs) by 2030. With more than four years already on, is India heading towards the 2030 goal? Can we see EVs as the future means of transportation? EVs are the latest trends in automotive industries and switching to EVs are encouraged by all developed and developing nations. EVs are in a nascent stage at present but are going to be a prevalent part of our lives. Rapid growth has been seen in this segment in the last couple of years. Pollution, growing demand of fuel, global warming are some of the major causes that EVs (eco-friendly means of transportation) are attracting eyeballs world-wide. India is the 4th largest country emitting carbon dioxide globally. In a recently concluded COP26 India has pledged to entrench its carbon dioxide emissions to net-zero by 2070. According to a report, the number of EVs registered in 2021 was only 1.7% of the total vehicles registered. This shows that the growth rate of adoption of this technology is sluggish in the country, even when there are policies to encourage this technology.

So, what are the challenges that are abstaining the consumers for its adoption?

The first and foremost reason could be the high prices of the EVs as compared to the conventional fuel-powered vehicles. This might have a significant impact on the purchasing decisions of the buyers specifically in the lower-end car segments. The high cost of the batteries adds up potentially to the high price of the EVs. Moreover, these batteries come with the added imported-cost tag with them as they are imported from the lithium-rich nations like China, Japan, Australia to name a few, that makes EVs even costlier.

The second reason for the protracted growth of the adoption of EVs could be the weak Electric Vehicles Charging Infrastructure (EVCI). EVCI are considered to be the backbone of e-mobility. The inadequate EVCI results into lower sales of EVs.

Apart from these discernible challenges, others could be uncertain consumer behaviour, supply chain

problem as India still depends largely on import of EV batteries, lack of product as only few options are available.

Believe it or not, EVs are inevitable and the future of mobility lies with EVs as the technology is eco-friendly and instrumental in reducing pollution apart from easy-to maintain and cost-effective. But to embrace EVs in India and meeting 2030 vision, what is important is opting for it smartly. There is a requirement to focus on increasing the awareness among people by focusing on low cost of running and maintenance of EVs, assuring scale up battery-charging infrastructure, promote batteries research and production in India to reduce cost etc.

SUMMER INTERNSHIP PROGRAM @IBS GURGAON

Internship Diaries @IBS Gurgaon

IBS Gurgaon conducted Summer Internship Programmes during the month February to May 2022 which gave exposure to many students to work with big brands. The purpose of this programme was to give an insight into the corporate world and help them decide on their career objectives. Summer Internships at a company enables you to build the skills you need to thrive in a professional context and can provide you the opportunity to train under seasoned professionals and discover what your chosen career path would be like. Students not only gain practical understanding of their specialization but also learn many skills like Teamwork, Time management, Communication skills etc. Gaining work experience is key for boosting your employability, especially as a management student. These Internship programmes were conducted in Offline modes as well as Online Modes. Below are the pictures of some students working in their offices & enjoying this insightful journey.



Shrestha Ghosh at Bajaj Allianz Life Insurance, Madangiri, New Delhi



Khushboo Chawla at Edgerise global, Noida



Prishita Kulshrestha at Lite Bite Foods Pvt. Ltd., Gurgaon



Shubham Teotia at CoFynd infotech Pvt Ltd, Gurugram



Bhawna Gupta at Profit Idea, Gurgaon



Mayank Kumar Jha at DS Group, Noida



Prashant Barthwal at Bajaj Allianz, Saket



Khyati Gupta at Lite Bite Foods Pvt. Ltd., Gurugram

SIP Panel Presentations@IBS Gurgaon



CONVOCATION 2020

The Convocation 2020 of IBS, Gurgaon was held on Saturday, May 21, 2022, at Airforce Auditorium, Subroto Park, New Delhi. Ms. Shalini Chakravorty, Chief Ethics & Compliance Officer at PhonePe, was the Chief Guest and delivered the Convocation Address, Mr. Sandeep Sehgal, Partner at AKM Global & Mr. Ashish Bhalla, Head-Campus Relations at HCL Technologies, were the Guests of Honour. Prof. S. C. Sharma, Senior Director, IBS Gurgaon, presided over the function.

The ceremony commenced with the convocation procession entering the auditorium. This was followed by lighting of lamps by the dignitaries on the dais and Saraswati Vandana performance by students.

The Senior Director, IBS Gurgaon introduced the dignitaries and welcomed the guests and the batch of 2018-2020. The Chief Guest, Ms. Shalini Chakravorty presented the medals and trophies to the meritorious students of the Class of 2020. In her Convocation Address she emphasized that students should always strive for excellence in all that they do in life and success would automatically follow them. She also shared insights on how important it is for students to have a positive ecosystem around them which would aid in their holistic development.

Mr. Ashish Bhalla, Guest of Honour stressed upon the importance of developing the behavioral competencies in oneself in his address. He shared that learning is an ongoing process and the students should always be eager to take feedback at their workplace.

Mr. Sandeep Sehgal in his address emphasized that if the students remain grounded and humble, they shall always walk on the path of success. He also shared the significance of work life balance with the graduating students. Guests of Honour Mr. Ashish Bhalla & Mr. Sandeep Sehgal administered the Oath.

The certificates were distributed to the graduating students by the Chief Guest - Ms. Shalini Chakravorty, Guests of Honour- Mr. Ashish Bhalla & Mr. Sandeep Sehgal, Senior Director - Prof. S. C. Sharma, Director Corporate Relations - Dr. Anupama Raina, Dean Examinations & Institution Building - Prof. R. Venkataraman and Academic Coordinator, Dr. Prapti Paul. Dr. Prapti Paul proposed the Vote of Thanks.

The function was anchored and coordinated by Ms. Archana Menon in close coordination with the entire staff and administration of IBS Gurgaon.

The function was attended by an audience of around 450 guests, including participants from the batch of 2018-2020, parents, distinguished guests from the corporate, alumni, faculty members and staff of IBS Gurgaon. The function was followed by high tea.

CONVOCATION 2021

The Convocation 2021 of IBS, Gurgaon was held on Saturday, June 11th, 2022, at Air force Auditorium, Subroto Park, New Delhi. Mr. Kapil Gupta, Global Head Energy and Commodities Business and Digital Transformation Wipro Limited was the Chief Guest and delivered the Convocation Address, Mr. Ashish Agrawal Director at Resurgent India & Ms. Renu Bohra Chief People Officer at DB Schenker were the Guests of Honour. Prof. S. C. Sharma, Senior Director, IBS Gurgaon, presided over the function. The ceremony commenced with the convocation procession entering the auditorium. This was followed by lighting of lamps by the dignitaries on the dais and Saraswati Vandana performance by students.

Prof S.C. Sharma introduced the dignitaries and welcomed the guests and the batch of 2019-2021. The Chief Guest, Mr. Kapil Gupta presented the medals and trophies to the meritorious students of the Class of 2020. In his Convocation Address he shared the mantras to success. He emphasized that students should always be resilient, open to take risks in life and be ethical in all their actions. Mr. Ashish Agrawal, Guest of Honor stressed upon the importance of the unlearning and relearning attitude. Ms. Renu Bohra in her address emphasized on the importance of proactiveness and self-awareness for the students. The certificates were distributed to the graduating students by the dignitaries. Dr. Prapti Paul proposed the vote of thanks. The function was anchored and coordinated by Ms. Archana Menon in close coordination with the entire staff and administration of IBS Gurgaon. The function was followed by high tea.



Orientation Session @IBS Gurgaon For the Batch of 2022-2024

IBS Gurgaon organized a two-day orientation session for the class of 2024 on 17th and 18th May 2022. The speakers conducted highly interactive and engaging sessions in a workshop mode where they explained the importance of Soft Skills such as analytical skills, collaborative skills, creativity and networking skills for achieving success in the corporate world. They also helped the students to understand the various sectors and helped them to understand how to prepare themselves for the job market by working on not just their domain knowledge but also on their employability skills. Mr. Sajal Gupta, Chief Executive Kios & Mr. Manuj Matta, Personal Success Coach were invited to share knowledge on 'Careers in Management'. We were also delighted to have Mr. Nikhil Jaipurkar, Founder CEO EdNxt International, Ms. Lovely Kumar, Co-Founder Larks Learning, Ms. Sangeeta Sumbly, Sr. VP Amalgam Frozen Foods, Ms. Namrata Handa, Master Life Coach who gave insights on the topic 'Personality Development'. The Academic team and Soft Skills department organized the speakers for the sessions. The students also actively participated in the program and gained a lot of knowledge. The orientation program also comprised of sessions involving briefings by Senior Director, Prof. S. C. Sharma, on 700 days of the IBS journey. Director Corporate Relation Dr. Anupama Raina and Dy PCOs briefed the student on the placement support. The academic team consisting of Academic Coordinator Dr. Prapti Paul and Dy ACOs briefed the students on the academic guidelines where the administration team explained to the students about the support available to them in terms of infrastructure and facilities.





Briefing for the batch of 2021-23



CAMPUS BUZZ

Clubs @ IBS Gurgaon Coordinated by Students' Council

Accounting and Taxation Club of Students' Council, IBS Gurgaon organized its very first offline inaugural session for the academic year of 2022-24, on 22 June, 2022. This scholarly session was addressed by Mr. MP Vijay Kumar, FCA FCS, FICWA and CFO at Sify Technologies Ltd. on a very interesting and informative topic "Valuation in Times of Turbulence". The event was coordinated by Dr. Ranika Chaudhary and Prof. R. Venkataraman, who addressed the spokesperson of the event and also welcomed all in this informative session. The event started with the words of wisdom of Prof. S.C. Sharma, Senior Director, IBS Gurgaon, followed by the invaluable learning from Mr. MP Vijay Kumar. He talked about principles of valuation, valuation of Zomato, IPO of Paytm, valuation on risk, going concern value, replacement cost model, current situation of Market, post Ukraine war condition, understanding business, startups, operating cash flow and all the other major aspects of valuation in current times. The event concluded with extremely valuable words of our senior director Prof. S.C. Sharma. He said "Valuation is an Economic concept, not a financial concept."



People Managers Club of the Students' Council hosted the participatory and entertaining event "Madness in Method" on 29th June, 2022. Many students took part in the interactive quiz that was part of the programme. The first phase consisted of a questionnaire, while the final round saw the chosen students split up into four teams. Each team was given a set of clues, and their job was to piece together a story highlighting interpersonal, teamwork, negotiation, leadership, and communication abilities. The observers shared a review for each team. The students were then addressed by our Senior Director, Prof. S.C. Sharma, which was followed by a vote of thanks and facilitation from the core committee members. Team 1 was declared the winner, with Team 3 coming in second. The other two teams received time to finish their stories. The event was coordinated by Dr. Tavleen Kaur and Prof. Shalini Khandelwal.



Erudite Club of Students' Council organized an event Mindcraft on 24th July, 2022. The event was conducted to help students to improve their GK and Business News through interesting and insightful rounds. Participants were asked to scan a QR code, which acted as a portal for Google Form link. In this Google form they had been provided with some riddles, questions and crosswords. 2nd round was treasure trail. In this round participant were shown abstract images on the screen. Evaluation was done on the basis of communication skills, confidence and content creativity. This event was coordinated by Prof Vineeta Mishra and Prof R Venkataraman.



The E-Marketing club of the Students' Council of IBS Gurgaon organised an engaging session on the topic "Digital Edge". The guests for the event were Ms. Suruchi Goel and Mr. Chaitanya Sharma. The event started with a welcome speech by Prof. Prapti Paul. The guests engaged the students with an activity to create a brand from scratch by creating a brand identity, setting a target group, and positioning. They instructed marketing concepts with practical applicability and familiarised the audience with brand management as a lucrative career. They informed students about challenges, growth, and opportunities connected to digital marketing. They further elaborated on digital problems pertaining to e-commerce platforms like low marketing budget, fewer conversions, low visibility, and SEO improvement and gave innovative solutions related to it. The event was co-ordinated by Prof. Shweta Sharma.



Media Genesis Club of Students' Council conducted an event 'Avenis' on 1st July, 2022. The objective of the event was to create a joyful environment and fill students with enthusiasm by engaging them in different rounds where they were given some tasks and students got the platform to explore the world of media and its endless possibilities. Event turned out to be a great success which was coordinated by Prof. Sanjeev Sareen and Prof Mohammad Shariq.



CONVOCATION 2022

The Convocation 2022 of IBS, Gurgaon was held on Saturday, July 2nd 2022, at Air force Auditorium, Subroto Park, New Delhi. Mr. Sameer Chadha, Partner and CEO KPMG Global Services Ltd. was the Chief Guest and delivered the Convocation Address, Mr. Anoop Joshi President at Kama Holdings & Mr. Jatin Batra Director Growth Analytics at Frost and Sullivan were the Guests of Honour. Prof. S. C. Sharma, Senior Director, IBS Gurgaon, presided over the function. The ceremony commenced with the convocation procession entering the auditorium. This was followed by lighting of lamps by the dignitaries on the dais. Prof S. C. Sharma, introduced the dignitaries and welcomed the guests and the batch of 2020-2022.

The Chief Guest, Mr. Sameer Chadha presented the medals and trophies to the meritorious students of the Class of 2022. He also presented the IBS G yearbooks to the awardees. In his Convocation Address he advised the students to build their career patiently and to always have a growth mindset. Mr. Anoop Joshi, Guest of Honor stressed upon the importance of perseverance and curiosity. Mr. Jatin Batra in his address emphasized on the importance of proactiveness and discipline for the students.

The certificates and yearbooks were distributed to the graduating students were given by dignitaries on dais. Dr. Prapti Paul proposed the vote of thanks. The function was anchored and coordinated by Ms. Archana Menon in close coordination with the entire staff and administration of IBS Gurgaon. The function was followed by high tea.





IBAC CELL EVENTS

The IBAC Cell of IBS Gurgaon organised an event 'Job Search Secrets' on 30th June, 2022 where the guest speaker Mr. Subir Verma, Head of HR, IR& Medical service addressed the students and gave useful insights to students that would help them in excelling in their careers. The event began with an interesting skit on the topic 'Google and Pizza', followed by the address of Senior Director, Prof. S.C. Sharma where he introduced the guest's book 'Job Search Secrets.' The guest speaker also gave his advice on how students can choose their career, linking of passion and career, connecting with the people of same interest areas. The event concluded with a compelling quiz held between the students and the speaker which proved to be quite enlightening. The event was held under the guidance of Prof. R. Venkataraman.



IBAC Cell of IBS Gurgaon organized an event on the topic 'Leadership in Times of Change' on 23rd June, 2022 and the speaker was Ms. Padmaja Alaganandan, Partner and CPO, PWC. The event began with the lighting of the lamp followed by an audio-visual compilation of IBAC Prof. R. Venkataraman and a welcome address by our Senior Director, Prof. S.C. Sharma. The speaker gave her thoughtful insights on leadership and term ADAPT (Asymmetry, Disruption, Age, Polarisation and Trust) that revolves around the current social trend in the world, she also talked about the challenges that were faced in the pandemic. Ms. Padmaja also shared some attributes that leaders should have, she introduced the audience with the six paradoxes of leadership that means the contradictions one should embrace to be a good leader. The event wrapped up with a question and answer session, a quiz based on the learnings made during the event and a vote of thanks.



Strategy Development Workshop for IHG Crowne Plaza, Greater Noida, Senior Management Team

A Strategy Development Workshop for the senior management team of IHG Crowne Plaza, Greater Noida was conducted on 29th June, 2022 at IBS Gurgaon. Fourteen senior management members from all the functional areas of the hotel participated in the workshop which was led by Prof. Mohammad Shariq and Prof. Abdul Aziz Seyid.

The two concepts which they really appreciated were identifying white space and the difference between strategic and operational issues. The participants rated the workshop as "Excellent" and felt that it would greatly help them in the next stage of making their business plan for strategic growth.



Mentoring Session by Senior batch to the class of 2024



ALUMNI KNOWLEDGE SHARING SESSIONS

Alumni Mentoring Sessions



Mr. Manomay Singh, Director Sales, Skit, delivered his thoughts on process of sales and important factors for Sales. According to him, without networking sales cannot be done. He talked about how a manager can identify the roles and responsibilities of an employee to make it an effective team. He further threw light on what is expected from students from a placement point of view. Mr. Singh also talked about innovation, project management and punctuality.



Mr. Vaibhav Chandra, Senior Manager at Ameriprise Financial Services shared his thoughts on changing corporate expectation and how to prepare for same. According to him up skilling yourself on daily basis is very important. Learning new skills will help you throughout your journey. Constant learning and having fluid mind is very important to sustain and survive in an organization. He further explained the importance of creative and critical thinking, seek opportunities outside zone of comfort. Managing people is the key skill for a manager.



Dr. Bikash Sharma started his session with how he managed to study, SIP and additional courses at campus. He further explained how these learnings at IBS shaped him and unknowingly made him ready for the corporate world. These learning mainly focused on A) Adaptability B) Cross Culture C) Diligence and Endurance D) Multitasking E) Time Management F) Problem Solving. After working many years at different work places, he always knew something was missing. This missing piece was his desire to work deep rooted within education sector. He, with his team mates went to

the rural areas and less developed areas of Africa and identified lack of educational facilities for the underprivileged. He reinstated the need for students to be prepared for the after-Corona era, which can be achieved by the channelizing Crisis Management, Critical Thinking, Technology Advancement, Work life balance, Speed / Flexibility and Innovative Thinking.



Mr. Aditya Thukral, Relationship Specialist at Proctor & Gamble delivered his thoughts on requirements in Corporate. According to him money, material, machine and HR are the important sources to run any company but in that too the most important is HR because they are responsible to hire the best professionals. He imparted knowledge on qualities of a good leader. Decision making is the most important quality followed by conflict resolution/problem solving and logical thinking. In corporate world one should be initiative taker, self-starter, self-motivated, should be good at multitasking, creative, innovative, and should know how to form good strategies. In last he suggested students to be as much participative in the co curriculum activities conducted by institute.



Mr. Amit Kumar Shroti, Service Delivery Manager at Agilent Technologies delivered his thoughts on Job Expectations and Job reality. In the beginning of session, participants were given an overview of corporate life and what to expect from it. The importance of being technologically savvy and adaptable to new technology was emphasized. He further talked about how to gain confidence and how to never stop learning. Mr. Shroti concluded his address by discussing the demands of the gig economy and how critical it is for us to focus on our own development.



Mr. Shivam Kakkar, an alumnus of IBS Gurgaon delivered his thoughts on various career options present to students after MBA. He explained about how to make a decision about going into a particular industry. Knowing one industry in detail helps student to start their corporate journey in better way. Next he threw light on digital marketing and what is the future of digital marketing. At last he spoke about on managing stress and work and personal life.



Ms. Neha Kulwal, Country Manager at Admitad delivered her thoughts on long term career and importance of soft skills in corporate world. In the beginning of the session, she briefed about life at corporate world and challenges faced in the corporate journey. She further briefed about importance of innovation in the corporate world. Ms. Kulwal guided few techniques on how to get prepared for corporate world with the help of, open mindset, continuous learning, developing soft skills, and clear vision. She talked about her own experience and taught about the importance of being passionate, networking skills, creativity, taking leads, never to saying no to anybody.



Ms. Suruchi Bhatia, Talent Development Manager at AON delivered her thoughts on life journey and importance of soft skills in corporate world. In the beginning of the session, briefed about life at corporate world and challenges faced in the corporate journey. She elaborated the importance of attitude and decision-making skills. She explained about importance of soft skills in each step of life at corporate. In the end of her session taught about ways to be confident and presentable in front of an interviewer. Covered about techniques to excel in an interview which includes knowing about one's strengths and weaknesses, knowing about yourself and correct thing to speak at the right time.



Mr. Sumit Mishra, Group Manager at Evalueserve shared his thoughts on life journey and importance of General Awareness. He introduced students to the importance of six sigma certification. Mr. Mishra explained about different financial models like dividend growth model, equity research model and CAPM. He further explained why it is important to understand business model of the company. In the end of his session, he talked about how covid changed the scenario from offline to online.

Alumni Orientation Session



Mr. Rajeev Arora, Director IT at Capgemini, imparted his thoughts with the class of 2024 on the Orientation Day. He inspired students by throwing light about his own journey in IBS, and he shared with the new batch an opportunity by sharing videos and experiences from other alma maters. Mr. Arora advised students to keep learning and never give up because they will eventually get at their destination. He also advised being brave enough to pursue your dreams and opportunities. It was an extremely inspiring session that addressed the significance of believing in yourself and your aspirations.



Mr. Onkar Nath, Associate General Manager at Mosaic India delivered a session on the orientation day for the new batch of IBS, Gurgaon. He discussed in detail about importance of management in professional and personal field, guided on how to be industry ready and how IBS can help student in this journey of career growth. Mr. Nath promoted the idea of identifying rational goals and making use of all the opportunities at IBS to achieve them. Setting micro goals and working on them with positive attitude should be the motto of the students. Corporate world is very dynamic. Learning new skills regularly can help in long term for career enhancement.



Ms. Rashmi Goswami, Chief Manager at ICICI bank delivered a guest lecture on the occasion of Orientation session for the new Batch of IBS Gurgaon. She enlightened the students with her knowledge and experience in her field, giving insights about the industry's expectations and changing workplace culture. Ms. Goswami encouraged students to develop capabilities to work under the pressure and remain effective. She further guided students on how the decision-making capability is the trait one should develop to excel. Career development should only the aim for student not the earning money. It was highly interactive session which highlighted the importance of preparing oneself for the corporate world.



Mr. Varun Kumar, Zonal Manager at Wonder chef imparted knowledge to the class of 2024 on the Orientation Day. He started his session with his journey in corporate field. He guided students on significance of having clear goals from very beginning of their journey for career progression and how IBS can help students to achieve those goals. Mr. Kumar encouraged students to gain maximum knowledge from their teachers and seniors and prepare themselves for the dynamic corporate world and its changing needs. He further encouraged students to make the maximum use of the knowledge being imparted at the IBS which will help them develop personally and professionally

GUEST LECTURES @ IBS GURGAON

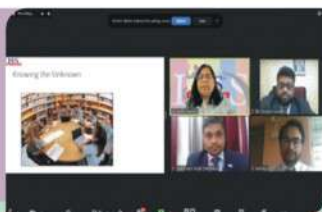


Ms. Nitika Bajaj, Human Resources Manager, South West Asia, IHG Hotel & Resorts on "Evolution of Training Practices" on 20th June, 2022 organized by Dr. Shubhangini Bhalla.

Ms. Rohini Vaishnavi, Founder, RV Learning Foundation on "Social Responsibility of Marketing and Marketing Ethics" organized by Prof. (Dr.) Vinod Kumar.



Faculty Knowledge Sharing Programs



Prof. Sangeeta Shahane on 'Mock Group Discussion and Personal Interview' on 7th April, 2022 via Zoom.

Dr. Anupama Raina and Prof. Prapti Paul on 'Academic Practice and Placements at IBS' on 25th April, 2022 via Zoom.



Dr. Nidhi Tak on 'Communication and Effective Leadership' at Shree Ramswaroop Memorial University on 12th May, 2022.

Dr. Vibha Arora on 'How to Write a Research Paper in a Scopus Listed Journal' at National P.G. College, Lucknow on 21st June, 2022 via Zoom.



Prof. Sangeeta Shahane on 'Enhancing Employability skills' on 30th May 2022 at Govt PG College, Sector- 46, Chandigarh.



Prof. Sangeeta Shahane on 'Enhancing Employability skills' on 31st May 2022 at Govt PG College, Sector- 11, Chandigarh.

STUDENTS' ARTICLES



Ritam Chaturvedi
21BSP0996

Electric Vehicles: The Future of Mobility

Ever wondered what happens if petrol is available for free? Sounds surreal right? But there was a time when petrol used to be way too affordable for people, equivalent to free. 27 Paise used to be the cost of 1 litre petrol back in 1947. Considering the present petrol prices, the only way to stop being assaulted by the petrol prices is to avoid using petrol consuming vehicles and switch to Electric Vehicles (EVs).

Our central government and many state governments are already providing many such schemes, policies and subsidies to promote electric cars, people can get a discount up to 15-20% for buying electric vehicles. Owning EVs will have no adverse impact on anyone when the petrol price will be skyrocketing. Taking environment into consideration, EVs will cause no air pollution and will help in fighting against climate change by reducing the supply of greenhouse gas emitted by petrol or diesel vehicles. These are the reasons why countries worldwide are getting rid of petrol and diesel consuming vehicles. Anticipated worth of EVs market by 2025 could be at least around \$475 billion. Sweden, Norway, Iceland, Denmark are some of the countries, leading in the race of EVs sold. Norway being at the top. In the year 2020, out of all the new cars sold in Norway, 74% of them were electric cars. This is a world record and 2/3rd of the cars being sold in Norway are electric cars.

A huge challenge for EVs in India could be inadequate charging infrastructure, as it would involve huge capital costs, time and installation at many locations. Nickel and Lithium plays a major role in manufacturing of EVs, shortage in any of the two could have adverse effects on the supply of batteries, this further adds up to manufacturing of low-quality batteries. Shortage in power supply is another drawback Government needs to put emphasis upon, as people still face lack of power supply for hours at a stretch.

EVs can definitely revolutionize the Indian automobile industry, it has the potential to decrease the per kilometre costs for vehicles up to 6 times. Effective initiatives need to be taken by the Government with regards to the charging infrastructures and the power supply. In India almost 75-80% electricity is generated by thermal power plant using fossil energy. For shifting in EV sector Government can focus upon generating more electricity through renewable sources. Initiatives like subsidies are effective in attracting customers for EVs but issues mentioned above would also lead to losing these new customers quickly.



Jay Kanojiya
22BSP0687

Electric Vehicles- The Near Future

An electric vehicle is one that is powered by an electric motor rather than a fuel combustion engine that burns a mixture of gases & gasoline to generate power for the running process. As a result, E-Vehicles are more in demand as compared to the current generation of automobiles in order to solve issues such as growing pollution, global warming, natural resources degradation and so on. Despite the fact that the concept of electric vehicles has been around for a long time but it has gathered a lot of attention in the decades as a result of the rising carbon footprint and other environmental implications of gasoline-powered vehicles.

It is a promising technology for achieving a sustainable transport sector in present as well as in the future. For the future outlook, E-vehicles are contributions that the human race can make to save our natural resources and our precious environment.



Harshit Singhal
21BSP0832

Future of Mobility- Electric Vehicles

EV or Electric vehicle is one of the most buzzing topics in every corner of the world. The biggest automobile companies are running in the race of becoming the winner of the Ev market and people and government are betting on them, we will later watch out who is the winner of this race, whether it is Tesla, the most valuable automotive company in the world or any other company. The world is predicting EVs to be the future of mobility.

The question lies in why there is so much noise around this topic. The answer comes up with the advantages which Ev brings up for the environment as well as for the user of Ev. It includes lower running costs, a cleaner environment, no noise pollution, a better driving experience, and subsidies from the government to the manufacturing companies and buyers. During this time Ev has become less popular because of the high cost of vehicles but with time the cost will go down and Ev will prove worthy for the future of mobility. Businesses who will adapt with the changing environment will survive and the one who will provide the most benefits to the users will turn out to be the winner.



Kavish Sekhri
21BSP0862

All about the future- EV

Electric vehicles are quickly becoming the preferred clean technology for the future of mobility. The economics of EVs have also improved significantly, with advancements, particularly in battery and charging technologies, expected to further reduce costs. The EV opportunity has long been regarded as a game-changer both globally and in India's automotive sector. Looking at India's post-liberalization journey, rapid urbanisation, migration, and economic growth have resulted in increased vehicle congestion and air pollution.

Despite such a compelling case for adoption, EV success has been hampered, among other things, by a lack of customer appetite and infrastructure roadblocks. Many EVs introduced in India have fallen short, either due to customer satisfaction or concerns such as cost, battery, and so on but all these can be tackled because EVs represent less than 1% of the overall market. The silver lining is that there is plenty of room for expansion. Looking at current EV penetration in India, the pace of adoption for 2Ws and 3Ws is expected to accelerate in the coming years. According to the KPMG report to which I referred, the figures are expected to be 25 to 35 per cent 2W penetration and 65 to 75 per cent 3W penetration by 2030. To enable widespread EV adoption, innovative business models such as battery swapping and regenerative batteries have emerged. This will also put a strain on environmentally friendly battery disposal and recycling practices. As a result, I believe that EVs are both the future of mobility and an opportunity.



Rohit Singh
22BSP1416

India's Future Transportation – Electrified?

India's automobile business contributes 7.1 per cent to the country's GDP. India imports crude oil worth 8 lakh crores rupees every year, a figure that is anticipated to rise in the next half-decade. Fossil fuels are non-renewable energy sources that are rapidly depleting and have an impact on the environment by restricting air quality and rising mercury.

According to NITI Aayog, India plans to increase EV sales by 40% for two-wheelers, and cars and 100% for commercial vehicles by 2030. The country also strives for “ZERO EMISSIONS by 2070”. Because of the high cost of electric vehicles and a lack of well-functioning infrastructure, India experiencing difficulty in developing a completely electrified environment. As a result, more than 60% of customers feel that electric vehicles are much more costly.

The government is anticipating transubstantiating as many customers to buy electric vehicles. The government also approves Phase 2 of the FAME scheme in which 86% of funds have been delegated to create more demand for EVs in the country.



Harshil Joshi
22BSP2055

Electric Vehicles-Future of Mobility

With our rapidly increasing population coupled with rising prices and decreasing quantity of non-renewable sources of energy and keeping in mind targets set under “India's net-zero emissions by 2070” (COP26) and “Paris Agreement” (COP21), we would require a mobility revolution by using renewable sources and EV is the answer.

There are multi-fold positive factors connected to EVs like reduction in crude oil import bills which would save forex reserves, decarbonisation of cities, and combating global climate change. Some negatives are battery manufacturing is a highly capital-intensive industry, lack of highly skilled labour force, lack of charging infrastructure, unavailability of rare earth elements and India's import dependency.

According to FADA, there is a three-fold increase in sales of EVs from FY 2021. Through various schemes like PLI, FAME Government is addressing various bottlenecks of the EV ecosystem. There is a need for a two-way contribution from regulators and users to build a sustainable environment.

Electric Vehicles: Future of Mobility



Deepika Pushpak
22BSP0447

It's appalling to perceive that India is ranked 5th most polluted country among 117 countries by World Air Quality Report IQ Air. But don't you think that we have a solution to reduce its impact to some extent? I am talking about the revolutionary movement in the field of automobile industry- Electric Vehicles. This shift towards sustainable mode of transportation has awakened the automobile sector to work on new technology and to make fresh investments towards a green future. Zero emission vehicles are the need of the era for the conservation of new renewable natural resources, to reduce pollution and global warming. Not only will it aid our mother earth, but also our country, as this eco-friendly mode of transportation will introduce a new sector for modernisation of transportation which will create employment in the country. And well, India has an intact market for electric vehicles and has already started its journey of green transportation with e-trains, e-rickshaw and e-buses. Although the Government of India is working on this domain, the major hindrance is lack of sufficient charging infrastructure and scarcity of power supply. So, India will have to work on it. Plus, this must be kept in mind that less demand of fuel will work parallel to more demand of electricity, and hence coal. The struggle is real, but the world is moving in the right direction to enhance the future of the globe.

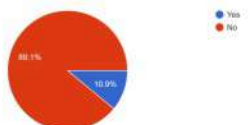
Yearbook Launch Event @IBS Gurgaon

IBS Gurgaon launched its Yearbook 2022 on 1st July, 2022 in the august gathering of all the faculty members and students. The event started with the unveiling of the yearbook by Senior Director, Prof S.C. Sharma along with Dr. Anupama Raina, Prof. R. Venkataraman, Dr. Prapti Paul, Dr. Sangeeta Shahane, Dr. Bhavna Chhabra, Prof Shweta Sharma and Mr Prashant Singh. Dr. Prapti Paul presented an overview of yearbook contents to the audience. Prof. S.C. Sharma addressed the students and explained the significance of the yearbook and applauded the efforts of the committee members who contributed richly in the making of the yearbook. A vote of thanks by Dr. Prapti Paul brought the ceremony to a close.

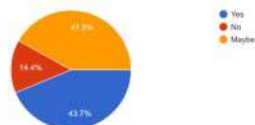


Findings of Opinion Survey from a sample of 376 PGPM students of class 2023 and 2024 at IBS Gurgaon:

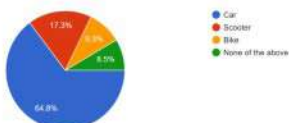
Q1. Have you purchased any electric vehicle till now?



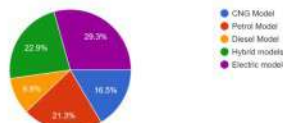
Q2. Are you interested in buying electric vehicle?



Q3. Which one of the following electric vehicles would you like to own?



Q4. What type of fuel consumption vehicle do you prefer?



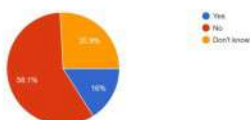
Q5. In your opinion, how would you rate an electric vehicle on the basis of review on a scale of 1-5? (5 being the highest)



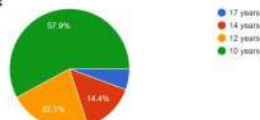
Q6. In your opinion, is the government doing enough work for the development of EV infrastructure for the future?



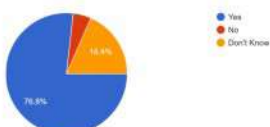
Q7. Do you have any charging station nearby?



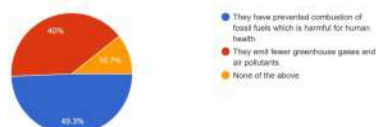
Q8. What is the life span of an electric vehicle's battery?



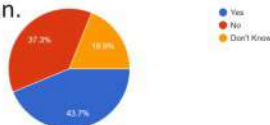
Q9. In your opinion, will electric vehicles be the future of Mobility?



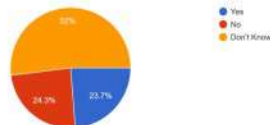
Q10. How are electrical vehicles one of the solutions for global climate change?



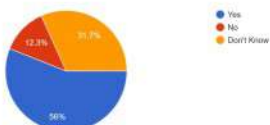
Q11. Electric vehicles are less expensive to own/ run.



Q12. Do electric cars break down frequently?



Q13. Do you feel electric vehicles are safer for driving?



Compiled By:-
Dinesh Kumar
21BSP0800



Compiled By:-
Ishita Grover
21BSP0847

CELEBRITY INTERVIEW



Tarun Kumar Thakur

Senior Research Analyst,
IHS Markit

Questions:

Q1. What do you think are the scope and challenges of Electric Vehicles?

Ans. The scope and opportunity of EV involves public EV charging infrastructure, Battery reuse/recycling/swapping, EV equipment manufacturing, among others. The primary challenges include range anxiety, charging infrastructure, battery cooling management, semiconductor shortage, among others.

Q2. There is a bright future for electric vehicles (EVs). Can electrically chargeable vehicles be the future of road transport? How likely are they to replace conventional combustion engine vehicles?

Ans. Yes, EV's can be the future of road transport only if the vehicles are charged using renewable/alternate sources of energy. If the EV is charged by generating electricity by burning coal, then we are back to conventional energy. As per being environmental friendly, yes, EVs do not produce any forms of pollution in their operation.

Q3. Will local electrical grids be able to handle the significant rise in the adoption of electric vehicles? Isn't there an additional burden on the electric grid as the number of electric vehicles grows? Does the impact of this additional electric generation and load factor into the greenhouse gas emission reduction estimates?

Ans. The local electrical grids are not designed to handle such additional load and will have to be modified/upgraded. Electricity generation if carried out by hydro/wind will not impact greenhouse gas emissions.

Q4. What is your opinion about the EV uptake in section 177 zero-emission vehicle (ZEV) states versus non-ZEV states?

Ans. The EV uptake in ZEV states is higher than the EV uptake in non ZEV states due to the mandates by the US Government. The EV charging infrastructure is also more developed in the ZEV mandated states.

Q5. As the EV cars range grows, how would the demand for public charging stations retaliate?

Ans. As EV car range grows, the density of public charging stations will have a spread across the nation (including expressways, hills, and remote villages). An EV primarily is meant for in-city use (and is not feasible for out station trips) due to the lack of charging infrastructure across highways and expressways. In current state, EV chargers are concentrated in and around major cities.

Q6. What impact do you think potential modifications in the fuel economy regulations will have on the EV trends?

Ans. Modifications in fuel economy regulations will impact electric vehicles. If automakers increase the fuel economy of their internal combustion engine vehicles, then these vehicles will become more expensive to produce due to the added cost of equipment installed in the vehicles. At this instance, if EV cost is reduced aggressively, it will cause a shift from IC vehicles to EVs, but if EV cost is reduced only moderately, then EVs may continue to be more expensive than comparable IC engine vehicles. So, OEM's may not be able to shift the consumer to EVs due to the continued disparity in costs.

Q7. If we look at the cost perspective, the cost of an Electric vehicle is also very high as compared to the IC engine vehicle. What is your take on the same?

Ans. At the moment, if we compare the EV counterpart of an IC engine vehicle, these are premium in cost which the EV demands. This difference is mainly due to the cost of the battery. If we focus on reducing the cost of batteries by experimenting with more efficient cell chemistry and cell packaging, as well as setting up EV battery manufacturing in our respective countries, then the cost of EV's can become equivalent to its IC engine counterparts.

Q8. Is auto mechanics' perception correct that, with the onset of electric vehicles, they are in a dying industry?

Ans. Due to less number of moving parts in an electric vehicle, the need for repairs and maintenance will certainly reduce in these vehicles. EV's will be equipped with a number of electronic systems, complex battery management and cooling systems, advanced driver assistance systems (ADAS), etc. I don't believe that auto mechanics are in a dying industry, but in order to survive, auto mechanics will have to upskill themselves to handle the complex electronic system and sensors in these vehicles.

ALUMNI SUCCESS STORY



Aditya Thukral

Procter & Gamble
Batch of 2014-16,
IBS Gurgaon

There is no such thing as early success.

Being an extrovert, I decided to opt for management during my last year of B.Tech and joined MBA in IBS Gurgaon in 2014. I knew I wanted to be in Sales or Marketing, so I decided to put all my efforts and attempts towards achieving a Sales mindset. Through rigorous field exposure in internship, hard-boiled in-class presentations and conducting activities as a Students' Council member, IBS laid the foundation for my future endeavors.

Passed out in 2016 from IBS Gurgaon, I worked in medical industry for 5 years in hardcore sales and enjoyed my fair share of successes and failures. Developing relationships, building loyalty and trust became my strong suits, but the most important learning was solving problems and fulfilling customer needs through my efforts. Now placed as a Relationship Specialist with one of the most respected FMCG company in world – P&G India, my learning could be recognized through my past experiences including my MBA days.

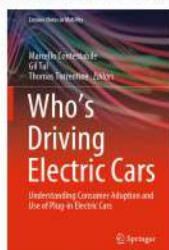
In his own words – Don't be afraid to do sales - What people want to hear about sales is that everyone can do it, it's easy and you can generate huge revenues by simply following certain steps, let me tell you it is not true. There is no cheat-sheet. It's a lot more difficult than that. Sales can be straight forward, but you have to take an approach where you almost got to be little cynical and a bit aggressive at the world because rest of the world is there to take your money. Being cynical helps you question everything, every method, every system and every objective of individuals. Sales is majorly about understanding consumer insights and asking the right questions helps you take better decisions.

My journey towards being an effective manager started in IBS and is worth the effort today.

With immense gratitude to the IBS Gurgaon team for recognizing my spark for corporate life, I look forward to contributing to Alma Mater in guiding the next generation of business managers at IBS campus.



**Compiled By:-
Anushka**



BOOK REVIEW

**Name of the book: - Who's Driving Electric Cars:
Adoption and Use of Plug-in-Electric cars.**

Author: - Marcello Contestabile, Gil Tal, Thomas Turrentine.

Publisher: Springer

Marcello Contestabile completed MSc in Environmental Technology and PhD in Energy Policy and Technology, both at the Imperial College London. Later, he served as a Research Fellow at the Imperial College Centre for Energy Policy and Technology (ICEPT). Since 2019, he has been a Principal Economist at the Qatar Environment & Energy Research Institute (QEERI), where he has led techno-economic and policy research activities concerning electric vehicles and charging infrastructures.

This book provides a detailed yet accessible overview of the most recent consumer studies on electric cars uptake and use. It covers the need of improving consumer behaviour in regard to electric vehicles, as well as the benefits that can be garnered from the expanding number of electric vehicle users who can now be observed directly. As a result, it examines the most important markets for electric cars in North America, Europe and Asia. The book also presents a wide range of factual data collected at the national level and highlights the basic lessons learnt, bringing together the knowledge and skills of authoritative scholars and working professionals. The book concludes with policy-relevant findings, a prognosis of the field's future progress in terms of methodologies and data availability, and an examination of many major concerns that policymakers and other stakeholders are now grappling with.

**Compiled By:-
Shubham Teotia**

CELEBRITY WATCH



Elon Reeve Musk

Elon Musk is a South African born American industrial engineer and entrepreneur who acquired PayPal and launched the aerospace transportation services company SpaceX. Born in 1971, he displayed an early talent in computers and video games and at the age of 12 created a video game code that earned him fame, as well as a fortune. He acquired a Canadian passport to avoid supporting apartheid in Africa at the time and also due to greater economic opportunities in the United States. Musk is also an early investor in Tesla, an electric automobile business, and is now the company's Chief Executive Officer. He is the seventh richest person in the world, with a fortune of \$70.5 billion dollars. Tesla's mission has been to accelerate the world's transition to sustainable energy since its foundation in 2003. Musk's Tesla electric car company and SpaceX rocket company are both trying to transform transportation on the earth and in space. He holds around 25% of Tesla in shares and options, but he has pledged more than half of his stock as security for loans, which Forbes has discounted. Elon is also the CEO and Founder of Neuralink, a company that develops ultra-high-bandwidth brain-machine interfaces to connect the human brain to computers. He also launched The Boring Company, which combines fast, affordable tunnelling technology with an all-electric public transportation system in order to alleviate soul-crushing urban congestion and enable high-speed, long-distance travel.

**Compiled By:-
Anjali Senger**



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