



Manasvi Bansal

Programme: MBA (Business Sustainability)

Project Title: Incorporating Resilience in Urban Power Systems: Developing A Framework for India's Urban Power Sector Sustainability

Host Organization: KPMG Global Services

Year: 2021

ABSTRACT:

The need of the hour for Indian economy is to grow sustainably; climate-resilient infrastructure is an important socio-economic tool that has the potential of contributing to the economic growth of our nation. With this lens, this paper aims at elucidating the resiliency transition path of one of the critical infrastructure sectors – the urban power sector.

The examination of the resiliency path would focus on the barriers to successful transition and associated stakeholders, critical success factors for transition and a framework to measure resiliency level. The study is based on secondary data from sources including World Bank, WRI, IEA, IRENA, IPCC, UNEP, KPMG publications, Government reports from Germany, Japan, India, UK and US, WEF, UN and research papers and incorporates a descriptive as well as an exploratory research design.

A case study approach has been followed for studying the urban power sectors of Germany, Japan, UK and US for identifying best practices that can be adopted by Indian urban power sector after accounting for local considerations. The findings of the study portray the obstacles being faced by Indian power sector in achieving resiliency, demonstrate critical success factors and best practices that the sector can adopt for successful resiliency transition and establish a potential framework for the measurement of urban power sector resiliency. Identified barriers include data, governance, institutional, monetary, natural, resilience capacity of infrastructure, societal and technical capacity.

Best practices relate to R&D, energy efficiency and optimization, target setting, resiliency vision and strategy, stockholding, cross-sector alliances, decentralization and resiliency metrics. The framework for resilience measurement encompasses 5 lenses including urban infrastructure, governance, economy, society and environment. This study advocates that climate-resilient infrastructure has the potential to provide a socioeconomic push to all stakeholders and calls for capitalising on this opportunity.

Keywords: Climate-resilient, Urban power systems, Climate change, Infrastructure, Sustainability



Reetika Passi

Programme: MBA (Business Sustainability)

Project Title: Stakeholder Engagement and Communication at Tata Consulting Services

Host Organization: Tata Consulting Services (TCS)

Year: 2021

ABSTRACT:

Background: With the advent of CSR Amendment Act in 2021, CSR impact assessment and reporting have taken the spotlight. Impact measurement and reporting have become more nuanced. Moreover, companies also now face an avalanche of ESG disclosures. Stakeholders around the globe demand information regarding corporate social, governance and environmental footprint.

Purpose: Synthesize a company-level measurement approach for all CSR programs globally to bring consistency in data reporting and communication of impact. Another motivation is to highlight key ESG trends at TCS to aid in management and communication of future risk and opportunities by bringing relevant stakeholders on board.

Method: This study explored one of the widely known impact framework called Social Return on Investment. It included elements such as theory of change, survey, constant stakeholder engagement, etc. The second part of study employed a Sustainability Balanced Scorecard. Building of one included tools such as trend analysis and benchmarking.

Conclusion: A consolidated list of indicators was prepared in accordance with the relevant stakeholders. The project saw the curation of Social Return on Investment framework and the Balanced Scorecard. It highlighted a method to monetize the social value and a framework that will aid in monitoring progress against material CSR initiatives by bringing them to limelight.

Keywords: SROI, CSR, TCS, BSC, Impact and ESG



Shreya Kalra

Programme: MBA (Business Sustainability)

Project Title: Building A Low-Carbon And Circular Economy In The Beverage Packaging Industry: A Comparative Study Of Tetra Pak In India And Europe

Host Organization: Thinkthrough Consulting Pvt Ltd

Year: 2021

ABSTRACT:

“The global beverage packaging industry is growing at a fast pace. The increasing global population and rising disposable income in developing economies are creating new avenues for packaged beverages. The increasing health awareness among youths has increased the demand for packaged juices, energy drinks, and health drinks, providing immense opportunities for manufacturers to increase their sales. Different beverages are available in different kinds of packaging formats, and it may differ across different geographies because of regulatory and economic factors.

The beverage packaging industry has evolved over a period of years. In 1970s, only 3 packaging formats were available in the market whereas in 2021, we have more than 10 packaging formats which are either used explicitly or in combinations for different beverage categories.” “The study on Building a Low Carbon and Circular Economy in the Beverage Packaging Industry will focus on different kinds of beverage packaging formats available in the Indian and European markets and their feasibility under different lenses of sustainability. The main focus of the study will be based on the beverage packaging formats developed by Tetra Pak and how the company has been working towards building a low carbon and circular economy in the beverage packaging industry.

Despite many available alternatives for beverage packaging, Tetra Pak is considered one of the best industry players for beverage packaging because of the multi-layered aseptic carton packaging and other sustainable inventions in the field of beverage packaging industry. The study will also highlight in brief about the effect of the COVID-19 pandemic on the beverage packaging industry and how the focus has been shifted towards safe and hygienic food and beverage consumption trends.

Lastly, the study will be concluded with two case studies based on the practices which Tetra Pak undertakes for ensuring circularity of its beverage cartons in India and Europe which will further help in drawing a brief gap analysis between the beverage packaging trends in the two geographies.



Pooja

Programme: MBA (Business Sustainability)

Project Title: Comprehensive Net Zero Organizational Framework

Host Organization: GAIL India Ltd

Year: 2021

ABSTRACT:

The World is talking about decarbonization. Companies, organizations, societies, and individuals across the world are setting their Carbon Neutrality or Net Zero Targets in order to limit the global temperature rise. The urgency we face today is a fruit ripened over hundreds of years of unsustainable business and actions.

The way a business conducts its functions has a direct (or direct) impact on the environment. Businesses (not all) are lacking the emotional intelligence in their decisions which is needed when we talk about a 'Business being Sustainable'. This study aims to help businesses, small or large belonging to any sector, by creating a 'Comprehensive Net Zero Organizational Framework' which can prove out as a guiding tool for the management and all the functional departments of a company to align themselves and support their decarbonization journey.

The output of this study serves specifically to GAIL (India) Limited and attempts to formulate an action plan for it to achieve its Net Zero vision. It also involves a peer review of the Net Zero targets of top Global Oil and Gas Majors. The study advocates for change in perception with respect to the subject of Carbon Neutrality/ Net Zero from a sole Science-based perspective to an amalgamation of Management cum Science perspective.

The framework is expected to come out as a viable market product to quench the upcoming market demand, as more and more companies who are setting their Carbon Neutral/Net Zero Targets would require a Comprehensive Organizational Framework to wholly act against the cause. It can also act as a reference point for further research to build upon and strengthen this version.

Keywords: Net Zero, climate change, decarbonization, organizational framework, business.



Punit Tokas

Programme Name: MBA (Business Sustainability)

Project Title: Analysis and Challenges Faced By E-Vehicles In Kakinada, Andhra Pradesh

Host Organization: RTI International

Year: 2021

ABSTRACT:

The main aim of this study is to conduct a market analysis and financial analysis of electric vehicles in Kakinada, Andhra Pradesh. While the world focuses on reducing carbon emissions to become carbon neutral eventually leading to minimizing the effects due to climate change, electric vehicles enable the transition towards a greener economy.

The government adheres to the Paris agreement and has also launched various schemes for the development of electric vehicles in the country such as FAME India schemes, NEMPP etc. These schemes have helped in demand creation, providing incentives on purchase of electric vehicles, installation of charging infrastructure and creating employment for workers in this domain. In this research, surveys were conducted with respect to consumer side (demand side) and with key people from financial organizations to understand the user perspective, hindrance towards switching to electric vehicles and also finding out the major challenges faced by these key stakeholders. After conducting the

survey, marketing analysis was used to figure out key players in the market and the correction positioning to increase the market share of electric vehicles in Kakinada.

Financial organizations were able to present their side of the picture along with their recommendations to bridge the gap between consumers and lending organizations. Risk associated with lending for electric vehicles is quite high for financial organizations and they often depend on collateral. Mortgage and resale prices are unknown in the market presently and financial organizations are reluctant to engage. After data gathering from the survey, excel based analysis was run where an independent variable was chosen and compared with five different dependent variables.

Relation with each variable was identified, acknowledged and stated. The survey helped in gathering sensitive information very crucial to adoption of electric vehicles in any city across India. Students are much more aware about the benefits of using electric vehicles followed by private employees and public employees. However, private employees have a greater spending capacity and independency to buy electric vehicles and are considered to be giving genuine response.

They travel between 0-50 km every day, are aware about the benefits of using electric vehicles and government subsidies and consider risks associated to be manageable. Due to higher income, they are willing to buy electric vehicles on cash as well as loans. As per reports, automobile industry contributes positively to the growth of Indian economy. Manufacturing enables a country to be independent and empower the economy via exports.

In India, there are more than 30 manufacturers in the domain of electric two-wheeler, three-wheeler, four-wheelers and electric buses manufacturing. They are spread all over India and have dealers network in different states. Electric 2-wheeler market in India is dominated by key players like Ampere, Okinawa, TVS, Bajaj, Pure EV etc. Electric 3-wheeler market in India is quite unorganized and involves players like Tunwal, Piaggio, Thukral, Mahindra and Mahindra etc. Electric Buses in India are dominated by key players like Tata, JBM, Eicher etc.

Product differentiation in this sector is usually on the basis of mileage, charging time, battery capacity, speed etc. Pricing of the vehicles usually depends on the battery capacity of the vehicle in 2-wheeler segment and 3-wheeler segment. Battery size depicts the charging cycles which determines the age of the batteries and lasting capacities. Major challenges acting as a hindrance in the development of electric mobility in the country is charging infrastructure, demand creation through awareness or advertisements and financing.

Charging infrastructure development is being taken care under FAME India scheme and private manufacturers have also been an active stakeholder in its development. EESL has established charging stations across India with fast and slow charging options both available. Financial Organizations do not have a product for financing electric vehicles apart from few organizations like SBI, HDFC Bank, RevFin etc. However, the lending rates are - 2 - quite high due to the risks associated with electric vehicles. These risks are resale percentage, cost of recovery of loan, technological barriers, infrastructure etc. Electric Vehicle charging infrastructure is another challenge for consumers to switch to electric vehicles.

The government has sanctioned electric vehicle charging stations across states in India. This will help in providing a boost to demand creation. States like Delhi, Maharashtra have players such as EESL who

have established charging points in different localities. Also, manufacturers such as TATA have installed their own private charging stations. Information available in the secondary sources was collected, tabulated in excel and analysis was completed to form a clear picture of the electric vehicle landscape in India.

Introduction of electric vehicles in the market will help us as a nation reduce carbon dioxide emissions in the environment, leading to lesser global warming and thus minimizing harmful effects of climate change. This research was successful in capturing demand side challenges and supply side challenges and focus on the insights of the EV Industry.