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STRIDES – A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE

VOLUME 2

ISSUE 2

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Dr. Santosh Kumari
Ph.D., M.Phil., M.Com., M.A. Educational Leadership and Management
(University of Nottingham, England, United Kingdom)

Assistant Professor
Department of Commerce
Shri Ram College of Commerce
University of Delhi
Delhi-110007
India

E-mail: strides@srcc.du.ac.in

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All correspondence relating to publication of the Journal should be addressed to:

The Principal
Shri Ram College of Commerce
University of Delhi, Maurice Nagar
Delhi - 110 007 (India)
E-mail: principaloffice@srcc.du.ac.in

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INDIAN

T-7, NEW TEACHERS FLAT, SHRI RAM COLLEGE OF COMMERCE, UNIVERSITY OF DELHI, MAURICE NAGAR, DELHI-110007

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S. B. Burde,
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Phone: 91-11-26863759
E-Mail: issn.india@niscair.res.in

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STRIDES – A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE

ISSN 2581-4931 (Print)

Shri Ram College of Commerce is well known for its academic excellence and dedicated approach towards dissemination of knowledge in the academic world. The college appreciates the role of research in education and is committed to developing an inclination towards research in both faculty and students. In this pursuit, the college has taken the initiative to launch a new Journal named 'Strides – A Students' Journal of Shri Ram College of Commerce'.

ABOUT THE JOURNAL

It is a double blind reviewed bi-annual Journal launched exclusively to encourage students to pursue research on the contemporary topics and issues in the area of commerce, economics, management, governance, polices etc. The journal provides an opportunity to the students and faculty of Shri Ram College of Commerce to publish their academic research work.

PUBLICATION POLICY

Shri Ram College of Commerce is committed to upholding the high academic standards. Therefore, the Committee on Publication Ethics (COPE) follows a 3-Stage Selection Process while approving a paper for publication in this Journal. The policy is as follows:

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To maintain high *academic standards, academic ethics and academic integrity* each research paper received by COPE (Committee on Publication Ethics) is sent for screening of plagiarism on "Turnitin". The committee adheres to the maximum tolerance limit of 25%.

After screening for plagiarism, research papers are sent to the *Referees* (Subject Experts) for double blind review.

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The journal adheres to a rigorous double-blind review policy. Each research paper received by COPE is sent for review to the *Referee* (Subject Expert). The reports submitted by the *Referees* are sent to the respective students for improvement (if any, suggested by the *Referees*). After reporting all the suggestions recommended by the *Referees*, the revised and improved version of the papers are re-submitted by the students to the COPE.

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Format of the article on the front page should be:

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- c) Abstract
- d) Keywords

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The abstract should capture the essence of the article and entice the reader. It should typically be of 100 -150 words, and in Italics.

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The research paper is to be typed on A-4 size paper with single line spacing. The complete length of the paper should not exceed 5000 words including endnotes and references. The font size should be 12 and font style should be Times New Roman.

Referencing style

The Journal adheres to the APA (American Psychological Association) Referencing Style, Sixth Edition. Students must refer to the APA Referencing Guidelines to ensure conformance to this reference style. For further information you may visit the following link - <http://www.apastyle.org>

Endnotes

Endnotes should be serially arranged at the end of the article well before the references and after conclusion.

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The first letter of the caption for table, figure, graph, diagram, picture etc. should be in capital letter and the other words should be in small letter - e.g. Table-1: Demographic Data of Delhi, Figure-1: Pictorial Presentation of Population etc.

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Declaration

As part of the submission process, the student and mentor needs to declare that they are submitting original work for first publication in the Journal and that their work is not being considered for publication elsewhere and has not already been published elsewhere. Again, the paper should not have been presented in any seminar or conference. The scanned copy of duly signed declaration by the students and their respective mentors has to be emailed along with the research paper.

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AWARD

The authors of best three papers from every Issue are awarded – First Prize, Second Prize and Third Prize on the SRCC Annual Day.



Principal's Message



The mission statement of the college signifying the existence and its road map to the achievement of its vision, reads as:

"To achieve and sustain excellence in teaching and research, enrich local, national and international communities through our research, improve skills of alumni, and to publish academic and educational resources"

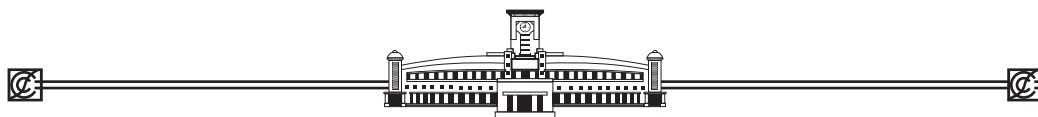
To achieve and promote excellence in publications and applied research, the college has taken the initiative to launch a new journal exclusively to publish students' research papers and articles. It will be an add-on to the enriched catalogue of college publications and academic literature.

The Journal has provided an opportunity to the students of our college to focus on research. Since the students were not opened to the research methodologies at the undergraduate level, they were mentored by experienced faculty of our college. Simultaneously, their articles were also reviewed by the referees and tested for plagiarism before publication. After reporting all the suggestions recommended by the referees, the articles were revised and then finally published. The college had successfully released the foundation issue of the Journal **"Strides – A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17"** on the occasion of 91st Annual Day of the College held on 13th April, 2017. The Journal was released by Shri Prakash Javadekar, Honb'le Union Minister of Human Resource Development, Government of India.

I would like to congratulate the students whose papers are published in this issue of the journal and simultaneously encourage all the students to contribute their research papers and articles for the successive issues of the Journal.

Best wishes for their future endeavors.

Prof. Simrit Kaur
Principal



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Editor's Message

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It is a bi-annual Journal launched exclusively to publish academic research papers and articles by the students on contemporary topics and issues in the area of commerce, economics, management, governance, policies etc.

In order to maintain high standards of publication, COPE (Committee on Publication Ethics) has been constituted. The COPE shall be the apex authority to take all decisions related to publication of research papers and articles in Strides. The decision of COPE shall be final and binding.

To maintain high *academic standards*, *academic ethics* and *academic integrity*, a rigorous process of double blind review of research papers is followed along with screening of plagiarism of each manuscript received by the COPE



for publication. The research work published in Strides is original and not published or presented at any other public forum.

The foundation issue of the Journal **"Strides – A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17"** was successfully released on 91st Annual Day of SRCC held on 13th April, 2017 by Shri Prakash Javadekar, Hon'ble Union Minister of Human Resource Development, Government of India.

The successive Issues of 'Strides – A Students' Journal of Shri Ram College of Commerce' shall be bi-annually released.

I congratulate all the students whose research papers are published in this Issue of Strides and express my sincere thanks to their mentors and referees.

Dr. Santosh Kumari
Editor



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Tushar Saini
B.Com (Hons.)-IIIrd Year
Shri Ram College of Commerce
University of Delhi



Aishwarya Thakur
B.Com (Hons.)-IIIrd Year
Shri Ram College of Commerce
University of Delhi

Mentor

Dr. Monika Bansal
Assistant Professor
Department of Commerce
Shri Ram College of Commerce

Green Investment: Dimensions and Policy Perspective

Abstract

Amidst the rising concerns regarding the increasing levels of greenhouse effect and global warming, today it is a matter of paramount importance to address this problem and to explore the investment opportunities in green practices. The aim of this paper is to provide a comprehensive review of the concepts related to green investment that are available in the current literature. The aim of this research is to dissect and explore what is being generally included under the term "Green Investment" and how it is being classified. The paper examines how green investment is defined through the perspective of various stakeholders like International institutions, Indian government and corporate houses. The paper concludes that, given the varied scope of the concepts of green investment, the most practical approach could be to take an open minded and flexible stand towards definitions and standards, with governments adopting a governance approach and the corporates adopting a strategically sustainable approach to green investment.

INTRODUCTION TO GREEN INVESTMENT

In the wake of energy crisis confronting the global citizens today, in relation to the price, supply and pollution associated with the conventional sources of energy, the international community has invested considerably for the use and development of non - conventional energy as a viable alternative solution. For instance as per the United Nations Environment Programme's "Global Trends in Renewable Energy

Investment 2016", "all investments in renewables, including early-stage technology and research and development as well as spending on new capacity, totalled \$286 billion in 2015". Additionally, the quantum of investments by the developing countries in renewable energy surpassed that of the developed countries for the first time in 2015.

Paris agreement has been accepted by more than 55 countries under which they aim at decreasing the GHG emissions and mitigating the climate change as a part of global commitment. These countries together account for more than 55% of the global GHG emissions.

The Sustainable Development Goals on Sustainable Energy have also been adopted by UN General Assembly in 2015. In addition to this various international forums like G20 and G7 groups of countries have committed to increase energy efficiency and to accelerate programmes on clean energy, respectively. Many agreements like International Renewable Energy Agency (IRENA), UN Framework Convention on Climate Change, the Energy Charter Treaty and the Kyoto Protocol have been formulated and are being worked upon to accelerate the use of renewable energy for a greener tomorrow.

MEASURING GREEN INVESTMENT

Amidst all the concerns revolving about the future of energy consumption around the globe and rising greenhouse emissions, the term Green Investment has gained importance of late and has emerged as a newly propounded concept. Increasing number of international forums and governments are formulating laws and policies and the corporates are making their practices more and more eco-friendly to conform to these regulations.

In order to gain a complete understanding it is important to review the term Green Investment. Green investment has been referred to as "the investment necessary to reduce greenhouse gas and air pollutant emissions, without significantly reducing the production and consumption of non-energy goods" (Luc Eyraud, 2011). In this paper we have covered the public as well as private investments. Green investment is a growing and evolving area and has various components. Of these the three main components of green investment are:

1. Low-emission energy supply – The foremost objective of green investment is to shift the supply of energy from fossil fuels to various other substitutes which are cleaner and pollution less by nature, either for electricity generation like solar, wind or nuclear or as a direct source of supply like biofuel. The scope of green investment covers both the established technologies like hydro power and nuclear energy as well as upcoming and emerging technologies like solar, geothermal and wind power.

2. Energy efficiency* - This component of green investment talks about technologies which help in reducing the quantity of energy required for provision of goods and

services. In the electricity segment, a vast amount of energy is lost while performing various functions ranging from power generation to power consumption. This head talks about the scope of green investment which involves innovative initiatives like improving efficiency in power generation, transmission and distribution by using more effective smart grid technologies. Potential efficiency surplus in the area of transport can be achieved by utilisation of more fuel-efficient and hybrid cars as well as greater use of mass transit. With regard to industrial goods, efficiency can be achieved through energy-saving appliances and a better waste management system.

* This is relevant in energy supply and energy-consuming sectors.

3. Carbon capture and sequestration (including deforestation and agriculture) - Deforestation happens to be the second largest contributor to carbon emissions worldwide after the fossil fuel combustion. It accounts for 20% of total emissions (IPCC, 2007). Therefore, controlling and minimising the ongoing deforestation, exponentially increasing the rate of afforestation and sequestering more carbon in soils by the help of new agricultural practices is of crucial importance for reducing carbon emissions. However, a shortage in the availability of data for this segment has restricted the scope of discussion.

Researchers have tried to hypothesise the “greenness” of assets in absolute terms (whether a product or technology is green or not) and in relative terms (a company having comparatively lower GHG emissions than the other). The extent can also be argued on ex ante basis (viz activity in energy efficiency, sustainable energy or water management) or based on specific indicators. There are definitions with focus on quantity and quality aspect to highlight different levels of “greenness”. There is a broader consensus that production of renewable energy is considered a green activity, including wind, hydropower, solar, biomass, geothermal and ocean energy. Few researchers are of the opinion that nuclear power also forms a part of renewable energy sector. However others argue that though it is a low-carbon source of energy, it entails other risks related to harmful radiation, waste treatment and national security. Furthermore, in areas of co-generation, hydrogen and waste, no consensus has been reached as these are usually by-products of industries which themselves are substantial contributors to greenhouse gas emissions. Also, ambiguity exists as to how to include the areas of the agriculture, green IT and financial services under the dimensions of Green Investment. Consensus of various authors keeps on changing with regards inclusion of biofuels and shale gas under the scope of green investment.

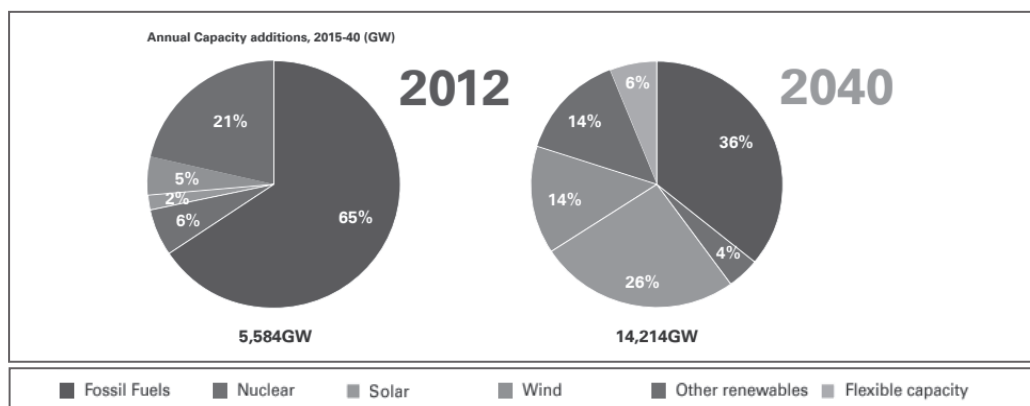
Green investing is generally also related with the following commonly used terms: Sustainable Investing, Socially Responsible Investing (SRI), Ethical Investing and Environmental Investing. The idea of green investment can be interpreted in different ways by different investors and this interpretation is generally based upon their financial motives and moral values.

From the perspective of an investor Green investment can be defined as a process which involves making investment decisions based upon environmentally conscious criteria with the objective of generating returns from the investment made but without compromising with the health of the environment. Today the investors are also aware of the environmental problems and are taking initiatives for the development and implementation of sustainable solutions to these problems by investing their financial resources in such upcoming projects. Indeed, values and standards have recently joined the ever vast universe of investments. With a change for the better, investors are now demanding for a wider range of investment products which incorporate their desire "to do well financially by doing good ethically". Green Investment has been growing over the past years, via green private equity and infrastructure bonds, green bonds and green assets classes.

The definition of green investment is an evolving topic which clearly deserves further research and analysis. A discussion at a greater scale between the institutional investor communities, organisations at an international platform and the financial regulators is desirable to develop further understanding on this and to gain a more informed viewpoint on the broader long-term investing and green growth issues.

More and more changes can now be seen at the grass root level with the international community and governments setting targets and implementing laws to achieve them. Various targets have been set in different areas, be it increasing the production capacity of renewable resources, decreasing GHG emissions or increasing green cover. Recent additions in the renewable energy sector provide indications on how this sector will develop globally in the upcoming decades. As per the trends shown in Figure 1 we can note that solar (Photovoltaic, Concentrated Solar Power, Heating and Cooling), wind (off-shore and on-shore), hydro and bio power are more popular amongst developers and investors.

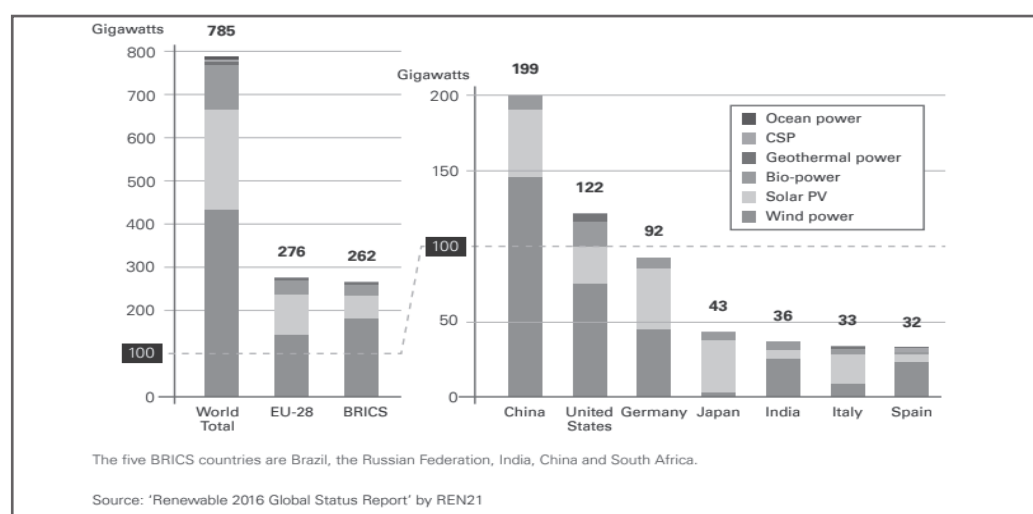
Figure 1: Projected Capacity Addition Trends



Source: Bloomberg New Energy Finance, 2016

Figure 2, shows that by late 2015, the top 5 countries for total installed renewable electric capacity were China, the United States, Brazil, Germany and Canada. China is the leader in renewable power with approximately 495 GW which is one-quarter of world's renewable power capacity. India and China have emerged as the top two destinations for green investment. However, India is yet to wholly capitalise upon its abundant renewable energy and is keen to explore and expand its operational activities for the same.

Figure 2: Renewable Power Capacities in World, EU 28, BRICS and Top 7 Countries, End-2015



GREEN INVESTMENT: AN INDIAN POLICY PERSPECTIVE

India stands at a critical juncture in upgrading renewable energy to provide access of energy to growing cities and widespread rural communities. With the changing environment in the international arena, the aim of the Indian government is to increase the capacity of renewable energy by giving push to the renewable sector. The government has targeted to achieve the installed capacity of 175 GW by 2022.

In order to speed up the investment in clean energy the Indian government has introduced Renewable Energy Certificate (REC) scheme. REC is a market based intervention scheme which offer incentives for renewable electricity through demand created by giving mandatory Renewable Purchase Obligation (RPO). The International Solar Alliance which has its headquarter in India, is also helping in accelerating the investment in solar power systems through international collaboration for innovative financing.

Table 1: Renewable energy targets for the next two years.

Source	2017-2018(in MW)	2018-2019(in MW)
Solar Power	15,000	16,000
Wind	4,600	5,200
Biomass	750	850
S H P	100	100
Total	20,450	22,150

Source: Ministry of New and Renewable Energy (2016)

Indian Government has been successful in achieving the set targets in various areas. Some of them are:

- There has been solar power capacity increment of 3,020 MW in 2015-16. Adding to this around 1750 MW capacity has also been added till late 2016.
- Globally, India is at 4th position in terms of wind power installed capacity succeeding China, USA and Germany which are the leading ones. In 2015-16, wind power capacity addition has been around 3423 MW.
- Installations of 51 MW of biomass power plants have been done in 2016-17. Family Type Biogas Plants are also being installed by the Central and State governments under the National Biogas and Manure Management Programme (NBMMP) for households of rural and semi-urban areas.

Some of the other incentives taken by the Government of India to step up its position in use of renewable sources are:

- National Solar Mission has been launched with the aim of increasing the solar power capacity from 20 GW to 100 GW by 2021-22.
- Installation of 34 Solar Parks of total capacity 20,000 MW in 21 states has also been authorised by Ministry of New and Renewable Energy.
- With a target of achieving 40 GW grid connected solar rooftops by 2020 government has started working intensively on increasing solar rooftop space. By 2016 about 500 MW rooftop panels have been installed and close to 3,000 MW capacity project has been sanctioned which is under installation. Major sectors like Airports, Railways, Hospitals, Government Buildings, Educational Institutions are also being targeted in addition to the private sector.
- A project for setting up of 1000 MW Inter-State Transmission System (ISTS) connected Wind Power Projects has also been implemented by the government.

Government is also taking various steps to promote the adoption of renewable energy by various other players in the market like corporates, households, NGOs etc. For this the government is offering incentives like concessional finance, viability gap funding, capital and interest subsidies, generation-based incentives (GBIs), fiscal incentive (MNRE,2016).

GREEN INVESTMENT: A CORPORATE PERSPECTIVE

Undoubtedly, the hardships facing the globe today cannot be resolved by any single player and requires a collaborative effort of the major three players - government, business and society. Corporates have a very meaningful and influential role to play in bringing about a change in the patterns of energy utilisation. With their diverse entrepreneurial capabilities, managerial skills and a spirit of innovation, corporates can bring about transformational change in the classical frameworks by expanding the use of renewable sources. The pioneering abilities which businesses employ to come up with various products and services can contribute to sustainable and inclusive growth.

The private sector is becoming more responsible in its operations and is looking for more and more renewable energy options for functions that consume large amounts of electricity. Google's data centers consume heavy amounts of electricity and in light of such challenges it took up a resolution of sourcing 100% renewable energy power and has committed to purchase 2.5GW of renewable energy. Google has also committed to invest close to USD 2.5 billion in renewable energy projects. Apple has also recently issued USD 1.5 billion green bonds to finance various projects in the field of energy storage and efficiency projects. Many Indian companies have also come up with their own targets to reduce the consumption of energy and to invent and develop energy conservation mechanisms.

ITC LIMITED

ITC has been actively investing in green energy and has earned itself the repute of being the only company in the world to be water positive for around 15 years, carbon positive for close to 12 years and solid waste recycling positive for around 10 years. During the year 2016-17, there has been a considerable reduction of 1.6% in the overall energy consumed as against 21,946 TJ (Tera joule) consumed in 2015-16. In addition to this, ITC has also increased its use of renewable energy in its overall energy consumption portfolio. Its use has increased from 47.3% to 48.2% on a year on year basis.

Six ITC units have procured more than 90% of their electrical energy needs from renewable sources in 2016-17. ITC has continuously put in efforts to minimise energy consumption and to increase the usage of renewable energy across various units. This has led to a control over GHG emissions. EY has verified the 2016-17 GHG inventory of ITC to be at the 'Reasonable Assurance' level. Around 8,100 tons of greenhouse gas

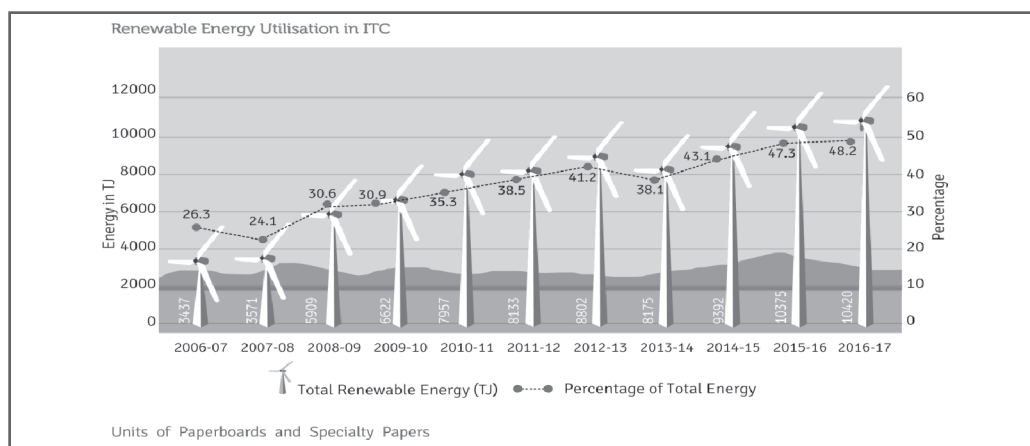
emissions (under Scope 1 & 2) were avoided with the implementation of the energy conservation measures in order to save both direct and indirect energy. The reduction in GHG emissions has primarily been attributed to the following factors:

- Decrease in Direct GHG (Scope 1) emissions - Reduction in utilisation of fossil fuels in cogeneration plants due to increased usage of wind electricity and various energy saving equipments.
- Decrease in Energy Indirect GHG (Scope 2) emissions – By replacing grid electricity with wind electricity at several ITC units and a decrease in energy consumption through multiple energy savings initiatives.
- Increase in Other Indirect GHG (Scope 3) emissions - Due to remarkable push to the business at Agro Business Division, the transport emissions are leading to an increase in Scope 3 emissions.

The company highlights a few main reasons which have contributed towards reduction in its consumption of energy:

- Upgrading the boiler and steam turbine system for bettering the cogeneration.
- Most favorable electricity mix from wind power and cogeneration plant.
- Introducing energy saving initiatives such as optimisation of refiners, automation of equipment etc.
- Utilisation of wind energy to improve the efficiency of cogeneration units.
- Better utilisation of steam through process optimisation by remodelling the process of condensate recovery and introducing effective steam traps.

Figure 3: Renewable energy utilisation in ITC



Source: Ministry of New and Renewable Energy (2016)

The company's goal is to move towards a 50% share of renewable energy by 2020. ITC aims at achieving the set standards by following the respective strategies-

- Sustaining the management approach in terms of conducting regular energy audits, benchmarking and target setting to reduce specific energy, enhancing the techno-commercial feasibility to invest in renewable energy and using Integrated Sustainability Data Management System (ISDMS) for continuous review of performance.
- Redesigning the strategy as per the requirements of the economy.

INFOSYS

Infosys is an information technology giant which has been on the forefront in adoption of green practices. In 2017, 11.1 million square foot of built-up area of their campuses was given a Platinum rating by LEED (Leadership in Energy and Environmental Design), renewable energy sources help it to meet 44.6% of the overall electricity requirements of its office campuses in India and it also became a member of the Carbon Pricing Leadership Coalition (CPLC) and announced an internal carbon price. Here are some of the other steps and initiatives taken by Infosys.

RENEWABLE ENERGY

Infosys has been making use of green energy for its power consumption for some time now. This green energy is either sourced from outside or is harnessed on site using solar panels. As per their sustainability report (2016-17) they claim to meet 44.6% (118.90 million units) power requirement in India using electricity from renewable sources.

Also 17,570 MW of electricity generation was done using their solar power system during 2017. With the aim of minimising the use of electricity from non-green sources in 2016-17, 2.4 MW capacity of solar energy plants have been installed by them.

Table 2: Location wise solar power capacity installation

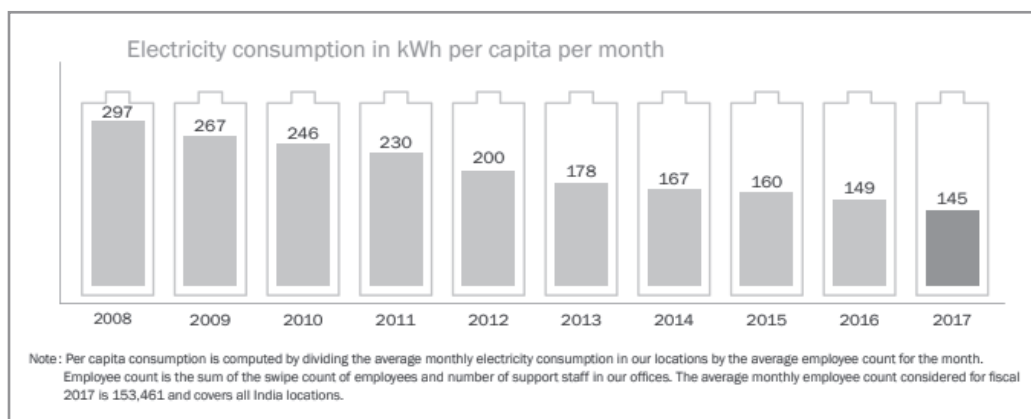
Location	Capacity (KW)
Pune	787
Hyderabad	550
Bhubaneswar	470
Bangalore	290
Chandigarh	202
Mysuru	103

Source: Infosys Sustainability Report, 2017

ELECTRICITY

Based upon Infosys Sustainability Report 2016-17, it is evident that with the increasing use of green energy by Infosys, there has been a reduction in its overall energy consumption. Additionally, it has reduced its per capita power consumption by 51% in 2017 as compared to 2008.

Figure 4: Electricity consumption per month for Infosys



Source: Infosys Sustainability Report, 2017

CARBON OFFSET PROJECTS

Under carbon offset scheme individuals as well as corporate players get an opportunity to invest in green projects with the end objective of balancing out their carbon footprint. More and more projects are being taken up in developing countries where different players are taking initiatives like using clean energy technology, purchasing and splitting up carbon credits from an emission trading scheme or planting more trees to reduce future emissions.

Infosys is also taking various initiatives which include a rural electrification project and two biomass cook stoves distribution projects in rural and sub-urban areas. As per their estimation all these projects will generate close to 50% of their carbon offset requirement.

GHG EMISSIONS

Today more and more companies are tracking their greenhouse gas emissions under various voluntary activities and legal laws. Under GHG Protocol Infosys is also tracking its greenhouse gas emission in various activities. GHG emissions can be classified as Scope 1, Scope 2 and Scope 3.

Scope 1: Direct GHG emissions

These emissions occur from sources that are either owned or controlled by the company.

Scope 2: Electricity indirect GHG emissions

These are greenhouse gas emissions from generation of purchased electricity consumed by the company. These emissions physically occur at the place where the electricity is generated.

Scope 3: Other indirect GHG emissions

These emissions are generated as a result of the activities of the company but they don't occur from sources which are either owned or controlled by the company.

Table 3: GHG emissions under various scopes

GHG emissions (tCO ₂ e)	2017	2016	2015
Scope 1	16,165	18,725	22,126
Scope 2	117,641	153,117	141,195
Scope 3	158,536	177,504	166,808
Total GHG emissions	292,342	349,311	330,702
Per capita emissions	1.90	2.36	2.46

Source: Infosys Sustainability Report, 2017

WATER

Corporations today are also paying attention towards their water consumption habits and disposal. In some countries rising cost of water is the reason why corporates are adopting water saving techniques. Water saving techniques includes a lot of ways; some of them are:

- Rainwater harvesting
- Innovative wastewater treatment technologies
- Use of water efficient fixtures
- Smart water metering for continuous monitoring of consumption
- Reuse of treated wastewater

Infosys is also making use of such techniques to make efficient use of the water. In 2016-17 it has been successful in reducing its water consumption by 8.36% on year-on-year basis. It has 270 injection wells and 25 lakes across different campuses in India. It is also harvesting rooftop rainwater and is using this collected water to recharge the ground water level using injection wells. As per the Infosys Sustainability Report (2016-17),

Infosys has recycled and reused a large amount of water used by them. Around 2,256,796 kilo liters of water was recycled which amounts close to 70.5% of the total water withdrawal.

CONCLUSION

The worldwide scenario has triggered a wave of concern and action to mitigate the harm done to the environment by adopting green practices at every possible stage. A growing number of countries are setting their energy efficiency and usage targets and are defining their roadmaps, adopting new policies and practices and upgrading the existing legislations to cover a wider range of activities. Several new financial incentives have been introduced to channelise additional funding towards green investment. The Government of India is also encouraging investments in green projects particularly involving the desired shift from "Carbon Credit" to "Green Credit". However, the clarity on what constitutes green investment is yet to be achieved and this structural deficiency hinders the exponential benefits which individuals might avail in the future.

The gaps which exist in the renewable sector are yet to be bridged. Markets need a clearer and transparent mechanism to smoothen the flow of funds to green investing measures. The set targets need to be revised retrospectively and achieved accordingly. A unified effort from all the stakeholders is needed to ensure that green investment becomes a handier topic of discussion and that it helps us move a step forward towards a greener and healthier tomorrow.

REFERENCES

- Clark, D., (2011) *A Complete guide to carbon offsetting*, Guardian (2011). Retrieved from: <https://www.theguardian.com/environment/2011/sep/16/carbon-offset-projects-carbon-emissions>
- Eyraud L., Wane A., Zhang C. & Clements B.(2011) *Who's Going Green and Why? Trends and Determinants of Green Investment*, IMF working paper (2011). Retrieved from: <https://www.imf.org/external/pubs/ft/wp/2011/wp11296.pdf>
- Frankfurt School FS-UNEP Collaborating Centre (2016), *Global Trends in Renewable Energy Investment 2016*. Retrieved from: <http://fs-unep-centre.org/publications/global-trends-renewable-energy-investment-2016>
- Google Environmental Report (2017). Retrieved from : <http://www.google.com/green/energy/>
- Green Energy Coalition Overview and Strategy (2012). Available at: <https://energy.gov/sites/prod/files/2015/03/f20/Skibo%20Green%20Energy%20Coalition%20Overview.pdf>

Inderst, G., Kaminker, C., Stewart, F.,(2012) " Defining and Measuring Green Investments: Implication for Institutional Investors' Asset Allocations" *OECD Working paper on finance, insurance and private pensions*, No. 2, OECD Publishing. Retrieved from: https://www.oecd.org/.../ WP_24_Defining_and_Measuring_Green_Investments.pdf

INFOSYS (2016-2017) *Infosys Sustainability Report*. Retrieved from: <https://www.infosys.com/sustainability/Documents/infosys-sustainability-report-2016-17.pdf>

ITC LIMITED (2017) *Sustainability Report*. Retrieved from: <http://www.itcportal.com/sustainability/sustainability-report-2017/sustainability-report-2017.pdf>

Ministry of New and Renewable Energy (2016) *Year End Review*. Retrieved from: <http://pib.nic.in/newsite/PrintRelease.aspx?relid=155612>

Reuters Business (2017). Retrieved from: <https://www.reuters.com/article/us-apple-climate-greenbond/apple-issues-1-billion-green-bond-after-trumps-paris-climate-exit-idUSKBN1941ZE>

Stammers, Robert (2011) *It's Not Easy Investing Green*. Forbes. Retrieved from: <https://www.forbes.com/sites/cfainstitute/2011/12/06/its-not-easy-investing-green/#4e5cb883ab9e>

Tropical Rainforest Animal (2017). Retrieved from: <http://www.tropical-rainforest-animals.com/green-investing-defined.html>

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STRIDES – A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE

HISTORY OF THE JOURNAL

The idea to launch this Journal was discussed in December 2016 by the former Officiating Principal, **Dr. R.P. Rustagi** with **Dr. Santosh Kumari**, the Editor of the Journal. Since the idea appealed to **Dr. Santosh Kumari**, she took the initiative to contribute to SRCC by creating this new academic research Journal and took the responsibility for its Creation, Registration, License and ISSN (International Standard Serial Number) etc. along with *Editorship*. Therefore, **Dr. Santosh Kumari, Assistant Professor in the Department of Commerce, Shri Ram College of Commerce** was appointed as the Editor of the Journal vide. Office Order – SRCC/AD-158/2017 dated March 14, 2017. She meticulously worked hard in creating the concept and developing the structure of the Journal. She introduced the concept of COPE (Committee on Publication Ethics) to maintain high academic standards of publication.

On behalf of the college, **Dr. Santosh Kumari** made every effort in seeking License from Deputy Commissioner of Police (Licensing), Delhi to register the Journal at "The Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India". The paper work for seeking license started under the former Officiating Principal, **Dr. R.P. Rustagi** on March 27, 2017. The foundation Issue of the Journal "**Strides – A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17**" was successfully released on the 91st Annual Day of SRCC held on April 13, 2017 by **Shri Prakash Javadekar, Hon'ble Union Minister of Human Resource Development, Government of India**. The title of the Journal got verified and approved by the Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India on April 21, 2017. On September 1, 2017, **Prof. Simrit Kaur** joined SRCC as Principal and signed each and every legal document required for further processing and supported **Dr. Santosh Kumari**.

On December 18, 2017, the College got the license "**License No. - DCP / LIC No. F. 2 (S / 37) Press / 2017**" to publish 'Strides – A Students' Journal of Shri Ram College of Commerce'. Due to change of Printing Press, the License got updated on March 09, 2018. On April 26, 2018, the SRCC Staff Council unanimously appointed **Dr. Santosh Kumari** as the '**Editor of Strides**' for the next two academic years.

On April 27, 2018 (The Foundation Day of the College), **Dr. Santosh Kumari** submitted the application for the registration of the Journal. On May 04, 2018, the college received the 'Certificate of Registration' for Strides – A Students' Journal of Shri Ram College of Commerce and got the **Registration No. DELENG/2018/75093** dated May 04, 2018. ***On behalf of SRCC, it was a moment of pride for Dr. Santosh Kumari to receive the 'Certificate of Registration' on May 04, 2018 at the Office of Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India (website - www.rni.nic.in).***

On May 07, 2018, **Dr. Santosh Kumari** submitted the application for seeking ISSN (International Standard Serial Number) at "ISSN National Centre – India, National Science Library, NISCAIR (National Institute of Science Communication and Information Resources). Weblink - <http://nsl.niscair.res.in/ISSNPROCESS/issn.jsp>". Finally, the College received the International Standard Serial Number "**ISSN 2581-4931 (Print)**" on June 01, 2018.

We are proud that this journal is an add-on to the enriched catalogue of SRCC's publications and academic literature.

STRIDES – A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE
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RELEASE OF FOUNDATION ISSUE OF STRIDES



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SHRI RAM COLLEGE OF COMMERCE

University of Delhi, Maurice Nagar, Delhi - 110 007

Phone: 011-27667905 Fax: 011-27666510

Website: www.srcc.edu