Print ISSN: 2277-7830, Online ISSN: 2348-5922

Descriptive Approach of Green Banking in the United Arab Emirates (UAE)

Mohamed Bouteraa¹

¹Ph.D.In Islamic Finance and Banking, Islamic Business School, College of Business, Universiti Utara Malaysia

ABSTRACT

Go Green is the need of the hour for survival in all scopes due to the side effects of financial development which has resulted in climate change and environmental damage. Banks can certainly play a proactive role between financial development and environmental protection. Banks of this kind is named as "Green Banking". Green Banking refers to assuring eco-friendly financial activities and thus the elimination of internal and external carbon. Green banking initiatives and practices are useful for the environment, society and financial institution. This article attempts to review the literature on Green Banking in the scope of the presented the status of the UAE's banks as far as green banking adoption is concerned. It has also highlighted the main initiatives, benefits, challenges, of Green Banking in the UAE. It is found that there green banking is a critical issue for the UAE; therefore, considerable initiatives have been taken in this regard by the banks and government, but green banking practices are still a challenging task due to the low adoption by the consumer.

Key words: Climate change, Eco-friendly practices, Environmental protection, Financial development, Green banking, Sustainable Development

Introduction

Presently, "GO GREEN" is taken as very renewable and buzzword amongst the scholars, financial and banking sector and most people of the world due to the alarming climate change and global warming.(Zhixia, Hossen, Muzafary & Begum, 2018; Samina & Hossain, 2019; Yin, Kirkulak-Uludag & Zhang, 2019). The banking sector is considered the main source for commercial project financing, that could play a significant role by leading funds and encourage the stakeholders on environmentally friendly projects (Thombre, 2011; Masukujjaman & Aktar, 2013; Sharifi & Hossein, 2015; Shaumya & Arulrajah, 2017). In other word, banks are the key drivers for the environment protection, playing a positive role and ecological aspects which would allow businesses and stakeholders for instructed investments on ecofriendly management, proper technologies and supervision systems (Choudhury, Salim, Mamoon, Bashir & Saha, 2013; Gupta, 2015). The banking sector could contribute to environmental protection by implementing the concept of green banking (GB) (Ganesan & Bhuvaneswari, 2016; Gupta, 2015). Turning now to the world's environment devastating country, the United Arab Emirates (UAE) is the fastest developing countries in terms of carbon emission due to the creation of unnatural marvels with heavy energy consumption, greenhouse gases emission, vehicle emissions, the absence of institutional reform and lack of environmental awareness (Baehr, 2009). Currently, the UAE is worried about frequent surprizing long-standing environmental problems. Confirming this from the recent report of the UAE-MoECC, (2017) The Minister of Environment has acknowledged that environmental problems have remained in UAE due to non-compliance with environmental laws by individuals and industries.

Moreover, numerous reports declared that the UAE is ranked number one in the world for creating the highest carbon impact for a long period of time (The World Wide Fund for Nature, 2010; EWS-WWF & Acclimatise, 2017; Government.ae, 2018; Worldatlas, 2019) Concluded by Stiftung (2019). "With rapid economic growth remaining predominant, it cannot be said that the UAE is currently on a sustainable path". Even though the majority of the banks in the UAE have started GB practices such as mobile banking, online banking, green loans, e-statement, solar ATMs. but the status of GB adoption in the UAE is still at an early stage among consumers (UAE-MoEW, 2015).

The Meaning of Green Banking

The relative importance of GB definition has been subject to considerable discussion. Although there are many researches attempt to define the concept of GB but, until now there is no standard definition for GB (Tara, Singh & Kumar, 2015). For instance,) defines GB as encouragingeco-friendly projects and decreasing the carbon footprint from banking activities. Meanwhile, Dewi (2017) conceptualize GB as Corporate Social Responsibility which is related to social responsibility and environment to stakeholders or parties affected by the existence of the company. Another definition of GB as by Trehan, 2015; Building & Kumara, (2017) a strategy could be adopted by any normal bank to contemplate society'sprospectas well as theaccountability of sustainable development. It is also called as an ethical bank or a sustainable bank (Trehan, 2015; Building & Kumara, 2017). In general, the GB is an inclusive bank activity taken to denote, beyond profit-making, which includes improving well-being and builds social equity while reducing environmental risks and scarcities by linking economic, environmental and social considerations to sustainable development.

Drivers Behind the Emergence of Green Banking

The banks have come under increasing pressure to demonstrably engage in incentives and activities described as GB. Ahmad, Zayed, and Harun, (2013) and Islam and Hasan, (2015) highlighted that the increased pressure for banks to adopt the concept of GB. According to them, GB pressures come from legal, social, moral, and financial factors (Ahmad et al., 2013; Islam & Hasan, 2015). Legal restrictions increase as a result of government restrictions, customers keep demanding higher transparency and ask for sustainable products, and investors set a greater demand-based not only on financial performance but also the way businesses meet the triple bottom line. All these pressures and developments increase corporate motivation to implement GB.

Several factors have been reported in the literature to motivate GB implementation in general and motivate banks to implement natural environmental management in particular. In their study Ahmad et al.,(2013) identified six main drivers namely 1) economic factor; 2) policy guideline; 3) loan demand; 4) stakeholder pressure; 5) environmental interest; 6) legal factor. Those factors were supported in a survey by Arumugam and Chirute (2018) who found that GB practice can be influenced by a wide range of factors, including stakeholders such as employees, and customers. Also, their survey of 160 employees and customers indicated that organizational characteristics and regulatory factors have a positive influence on GB practices.

The above discussion suggests there must be strong drivers for a bank to implement green banking. Moreover, the implementation of green banking policies is related to the ability of the bank to maximize shareholders' wealth & generate profit. Even though there are many factors associated with GB implementation, Ahmad *et al.*,(2013) contended that all of them will ultimately be linked to financial

motivation, because banks are adopting green banking policy because it thinks avoiding green banking will not only create some legal problems from various stakeholders but it will also be economically wrong. Adopting environmentally sustainable technologies is no more considered as a financial burden; rather it brings new business opportunities and higher profit. Green banking saves costs, minimizes the risk, enhances banks' reputations and contributes to the common good of environmental sustainability (Biswas, 2011). So, it serves both the commercial objective of the bank as well as its social responsibility.

Review of Literature

GB certainly aims atgreener and clean future. It can be observed through an extensive literature review that very limited studies in the area of GB adoption and supported by numerous researches that recommends conducting more studies in GB in order to provide a comprehensive overview (Shenoy, Hebbar, & Prabhu, 2017; Sahoo et al., 2016; Shaumya, & Arulrajah, 2016; 2017). Iqbal, Nisha, Rifat, and Panda, (2018) attempted to study the factors influencing the customer's adoption of GB in Bangladesh. By conducting a primary survey using the UTAUT model and Structural Equation Modelling (SEM) they found out that timeliness, facilitating conditions, environmental concerns, effort expectancy and performance expectancy, significantly affect the customers' perceptions towardsGB. Therefore, the findings showthat customers are maybe fairly realistic in theiroverall attitudes towards the use of GB. Laguir, Marais, El Baz, and Stekelorum, (2018) investigated the relationship between corporate financial performance (CFP) and corporate environmental performance (CEP) with specific reference to the French banking sector. They found that high CFP was allied with high CEP. They found also that CFP and CEP could strengthen each other, suggesting a bidirectional relationship. Linh and Anh (2017) investigated the effect of stakeholders on the performance of GB in Vietnam by conducting interviews among the bank's leaders and government representatives. Based on their studies, the interview findings show the significant influence and the crucial role of the bank stakeholders on the GB performance. Besides, they mentioned that banks should emphasize the importance to change the behaviour of banks' customers towards GB products and services as well as to define the set of principles for environmental and social risks valuation in credit appraisal to contribute to green banking and green growth strategies. Law, Hills, and Hau (2017) used the Hongkong and Shanghai Banking Corporation Limited (HSBC) a case study to test how environmental education and awareness training programs affect employees' behavior. The survey outcomes showed that staff who joined these programs increased knowledge and transformed their behaviour to the environment significantly. They also mentioned that trust and satisfaction with the institution amongst employees through the training, which in turn encouraged the employees' commitment to corporate sustainability. Iqbal, Nisha, and Raza (2017) studied service qualities and another set of variables that affect clients' behavioural intentions towards GB. The survey analysis report that reliability, privacy, responsiveness, empathy, and information quality affect positively the performance expectancy. In the meantime, performance expectancy, effort expectancy and facilitating conditions significantly affect users' intention to use GB. Implications of these results could offer managerial recommendations and directions for banks.

Objectives of the Study

- 1.To identify the Green initiatives adopted by UAE
- 2. To highlight the potential benefits of the Green agenda for the UAE
- 3.To study the major challenges of GBin the UAE
- 4. To provide suggestions for a successful GB model.

Research Methodology

This is a conceptual exploratory research that offers a clear overview of GB. The secondary data was collected for the research from published journals, internet sources and government reports.

Green Initiatives Adopted by the UAE Government

According to UAE SDGs (2019), The UAE Government strives to create an environmentally sustainable economy that encourages industrial growth. UAE-MoECC (2017) listed the introduction of various initiatives by the UAE to encourage renewable energy capital. These include:

- 1. Applying the slab tariff under which the service charges of customers would rely on their use and the expense of the fuel supplied by Dubai Electricity and Water Authority (DEWA).
- 2. Start of the Sharjah Electricity and Water Authority's conservation department to increase consumer consciousness about energy efficiency and how to reduce water and power usage
- 3. Establishing a new expert carbon recycling and cost-efficiency department.
- 4. The Emirates Authority for Standardization and Metrology (ESMA) announced the implementation of energy quality standardization and marking.
- 5. ESMA prohibits the importation of inefficient incandescent light bulbs (tungsten filament lamps)
- 6. Implementation of green and sustainable building requirements by the Ministry of Infrastructure Growth, the Executive Council and the Government of Dubai.
- 7. Implementation of Energy Star projects by Ministry of Climate Change and Environment, *Etisalat* and Pacific Controls
- 8. Abu Dhabi Urban Planning Council (ADUPC) Introduced the projects of *Estidama*(i.e. sustainability) and the Pearl Building Rating system.
- 9. Contributing to Water, Energy, Technology and Environment Exhibition (Wetex)
- 10. Enduring by demand-side management guidelines by Energy Dubai Supreme Council (EDSC)
- 11. Introduction Dubai Integrated Energy Approach 2030 and Dubai Clean Energy Strategy 2050
- 12. Liberalising the petroleum prices by the Ministry of Energy to sustenance the nationwide economy, subordinate fuel consumption, conserve the environment and preserve countrywide resources.

Potential Benefits of Green Agenda for the UAE

To evaluate the influence of green agenda on the UAE economy, a comprehensive macro-economic framework was developed by the UAE government under the vision of 2030, along with a Business-As-Usual (BAU) scenario and four determinedgreen economyscenarios. The frameworkanticipated average annual investment in green financial activities of 1.0 to 1.9% of the Gross Domestic ProductGDP by 2030. Meanwhile,the four green economy setupspredicted that GDP increase by 4.0 to 5.5% by 2030 overhead BAU. The expectedprofitableimprovement from those scenarios was appraised at AED 24 to 47 billion (USD 6.5-12.8 billion) by 2030 (UAE-MoEW, 2015). The economic gains will involve a 7-10% decrease in national annual use of fossil oil, a 7-20% decline of natural gas and an 11-15% decrease of energy by 2030. Under all scenarios, a reduction of the carbon intensity is expected from 18 to 25% of the accumulated emissions from 2013-2030. It is also estimated that 139,000-165,000 new jobs will be generated (1.9 to 2.3% over BAU). (UAE-MoEW, 2015). Such extensive green analysis clearly confirms the idea that greening the development would not interrupt the economic growth for the UAE if it were carried out in the right manner.

Major Challenges of Green Banking in the UAE

The acceptance of green finance is still at a low level among UAE financial institutions and stakeholders, as they face various barriers and challenges to launching it up and integrating it into their regular operating activities. The survey conducted by the State of Green Finance in the UAE UAE-MoEW, (2015) questioned the utmost important barriers and challenges of green finance among financial institutions of the private sector. The majority of respondents pointed out that the absence of adequate implementation of policies and regulations has resulted in difficulty in introducing the fit model of green finance in the UAE. Their appropriate application is crucial to give clear motivations for stakeholders to go green by fining non-compliers and rising the standards continuously. This was followed by the features impacting their bottom line, including the high risk of green sectors, lengthy payback period and absence of long-term finance, less profitable, and unclarity in profits. Besides, factors that affect decision-making, comprise the absence of comprehensive data and standard policy for measurement, reporting, and verification were also considered as important barriers.

Green Banking Initiatives Adopted by Large Banks in the UAE

In January 2016, the National Bank of Abu Dhabi (NBAD) the largest financier and market capitalization bank in the UAE, declared commitment to offer, finance, and invest a total of USD 10 billion (AED 36.7 billion) of fundingduring the following 10 years insocio-economic and environmentalprojects. This massive amount well-defined in accordance with the Green Bond Principles set by the International Capital Markets Association. This move will prioritize sustainable business as well as a statement of planned intent for the bank (UAE-MoECC, 2017). In June 2016, Emirates NBDone of the largest banking groups in the Middle East in terms of assets announced that it would invest AED 500 million (USD 136 million) by 2020in digital innovation and a multi-channel conversion of its methods, projects, products, and services. The first-of-its-kind initiative by digitization and social contribution as an important enabler. The digital bank will offer clients the latest self-service monetary management generation with convenient applications and E-Banking that enable them to perform more than 100 E-transactions. Thus absolutelywill reduce paper consumption (UAE-MoECC, 2017).

HSBC Bank Middle East the largest and most broadly international bank in the Middle East set REDUCE strategy (Zero-Paper) emphases on paperless products and services. The purpose of this strategy is to lessen the use of paper internally and externally, as well as to guarantee that all purchased paper originates from sustainable sources (UAE-MoECC, 2017).

In May 2016, the UAE's central bank announced that all banks in the country should lunch Go Green and paperless initiative in order to decrease paper usage through four pillars: the development streamlining, digitization, mass engagement, and awareness. Set a goal to lessenoverall paper usage by 10-15% by April 2017. This comprises a scheduled initiative for thebank departments to present their best ideas based on the level of their cost-saving, scalability, convenient implementation, besides the positive impact on employees' routine practices. Up to the present time, over 300 ideas have been generated, 30 of them have already implemented. For example, digitizing end-of-year reports is expected to cut paper usage by more than 7.5 million sheets of paper annually (UAE-MoECC, 2017).

Suggestions for Successful Green Banking

The integration of environmental and social approaches into the development objectives of the financial institution has helped to achieve an effective management system.

The UAE offers a solid model of the green agenda in terms of the implementation of ecologically friendly practices and innovative banking products and services that promote sustainable development. But the major challenge is the limited participation of the private sector and stakeholders. Therefore, the banks need to promote financial literacy among stakeholders by educating and empowering employees, customers, and society, to effectively administrate their own personal finances, as well as learning how the banking industry functions and translating theoretical researches into real-world action. Numerous researchers like Iqbal, Suviitawat, Nisha and Rifat, 2016; Kaf (2013) who had emphasized that improving environmental education and awareness programs area crucial concern to severalfinancial institutions. From extensive literature review in the area of GB, it is found that banks can go ahead and adopt the following strategies for going green in banking:

- 1. Involve with important stakeholders, increase awareness and information dissemination of environmental issues, and also their significant contribution to the economy, the environment, and society at large. The bank also needs to support the education of students by offering them a full scholarship to empower young, ambitious, and bright minds in the country.
- 2. Practical and direct support like guidelines on green finance and grants, subsidies, loans at a discountedinterest rate, as well as improve policy coherence and coordination in government.
- 3. Board directors should set SMART (Specific, Measurable, Attainable, Realistic and timely) green goals as interiorobjectives to lessen the carbon footprints along with the timelines.
- 4. Policymakers and decision-makers should develop roadmaps for authenticexecution and supervise the progress. The roadmaps could be divided into three milestones: short-term (up to 2019), medium-term (up to 2021) and long-term (up to 2030 and beyond).
- 5. Marketing departments should introduce green funds for clients who would invest in eco-friendly projects which absolutely lead to sustainable development.

Limitations and Future Directions

This investigation contains some limitations. First, it is conducted based on the datagathered only from the reports of the UAE's government and previous published academic journals. Secondly, the study investigation is focused on the region of the UAE. Finally, antecedent factors are not empirically examined. It is therefore critical that the current results should be empirically confirmed for future studies. Hence, it is recommended that it is likely to conduct similar studies within the private sector, Islamic banking sector and among the various groups of stakeholders in the UAE and all over the middle east which is actually recorded as the most contributors negatively to the environment. In order to overcome these limitations, further empiricalinvestigations are required. Lack of studies on GB limits the intensity of arguments in the currentstudy. An empirical investigation may be directed to examine the factors that overall influence the development of GB in emerging economies. For instance, identify the customers' GB adoption factors, thus change consumer perceptions towards GB.

Conclusion

Go Green is the buzzword of the 21st century. There is a constant rise in consciousness regarding safeguarding the environment. As such GB is an emergent concept. It integrates the environmental aspect with the banking activities to cut the bank's carbon footprint. With globalization and growing competition transform to the green trend provides a competitive advantage.

For the UAE there is a huge opportunity offered by the government and banks which they can exploit and move towards sustainable development growth. But, the limited participation of the private sector and stakeholders are considered the main challenge to achieve the intended objective. The literature review reveals that what is missing in the context of an implementation of the successful GB model is the level of consumer awareness and education. Therefore, appropriate training and intensive educational programs by banks and the government will actually make GB a success. Thus, Green is the word now which needs more attention by experts and academician to explore factors behind the adoption of GB by various stakeholders.

References

- Ahmad, F., Zayed, N. M., & Harun, M. A. (2013). Factors behind the Adoption of Green Banking by Bangladeshi Commercial Banks. ASA *University Review*, 7(2), pp.241-255. Retrieved from http://www.asaub.edu.bd/data/asaubreview/v7n2sl19.pdf
- Arumugam, D., & Chirute, T. (2018). Factors determining the adoption of green banking amongst commercial banks in Malaysia. *Electronic Journal of Business & Management*, 2, 50–62.
- Baehr, R. (2009). Carbon Emissions in the Middle East. Retrieved December 6, 2018, from https://www.jewishpolicycenter.org/2009/08/31/carbon-emissions-in-the-middle-east/
- Biswas, N. (2011). Sustainable Green Banking Approach: The Need of the Hour. Business Spectrum, 1(1), pp.32-38. Retrieved from http://iaamidnaporebranch.in/docs/IAA MB 9.pdf
- Building, L., & Kumara, B. M. (2017). Sustainable Growth of Green Banking in India: Issues and Challenges. Paripex *Indian Journal Of Research*, 6(2), pp.244-245.
- Choudhury, T. T., Salim, M., Mamoon, M., Bashir, A., & Saha, P. (2013). Influence of Stakeholders in Developing Green Banking Products in Bangladesh. *Research Journal of Finance and Accounting*, 4(7), pp.67-77.
- Deka, G. (2015). Green Banking Practices: a Study on Environmental Strategies of Banks With Special Reference To State Bank Of India. *Indian Journal of Commerce & Management Studies*, 5(3), pp.11-20.
- Dewi, I. G. A. A. O. (2017). Corporate Social Responsibility, Green Banking, and Going Concern on Banking Company in Indonesia Stock Exchange. *International Journal Of Social Sciences And Humanities (IJSSH)*, 1(3), pp.118-134. https://doi.org/10.21744/ijssh.v1i3.65
- EWS-WWF & Acclimatise. (2017). UAE Climate Change Risks & Description of climate change risks to 12 key sectors About Emirates Wildlife Society In Association With WWF (EWS-WWF). Dubai, United Arab Emirates. Retrieved from https://greenarea.me/wp-content/themes/divi-child/reports/WWF.pdf
- Ganesan, R., & Bhuvaneswari, A. (2016). Customer Perception Towards Green Banking. *IOSR Journal of Economics and Finance*, 07(05), pp.05-17. https://doi.org/10.9790/5933-0705010517
- Government.ae. (2018). Environmental challenges. Retrieved October 20, 2018, from https://www.government.ae/en/information-and-services/environment-and-energy/environmental-challenges-in-the-uae
- Gupta, J. (2015). Role of Green Banking in Environment Sustainability A study of selected Commercial Banks in Himachal Pradesh. *International Journal of Multidisciplinary Research and Development*, 2(8), pp.349-353. https://doi.org/10.13140/RG.2.2.33734.78407

- Iqbal, M., Nisha, N., & Raza, S. (2017). Customers' Perceptions of Green Banking: Examining Service Quality Dimensions in Bangladesh. In Managerial Strategies and Solutions for Business Success in Asia (1st ed., p. pp.1-20). In P. Ordóñez de Pablos (Ed.).
- Igbal, M., Nisha, N., Rifat, A., & Panda, P. (2018). Exploring Client Perceptions and Intentions in Emerging Economies: The Case of Green Banking Technology. International Journal of Asian Business and Information Management, 9(3), 14–34. https://doi.org/10.4018/IJABIM.2018070102
- Iqbal, M., Suviitawat, A., Nisha, N., & Rifat, A. (2016). The role of commercial banks in green banking adoption: a Bangladesh perspective. *International Journal of Green Economics*, 10(3/4), pp.226-248. https://doi.org/10.1504/IJGE.2016.10002862
- Islam, S., & Hasan, M. (2015). Reasons behind the Practices of Green Banking by Commercial Banks: A case study on Bangladesh. European Journal of Business and Management, 7(22), 51–60.
- Kaf, M. A. A. (2013). Management of Water Resources in Protected Areas. (H. Farfán González, J. L. Corvea Porras, I. de Bustamente Gutiérrez, & J. W. LaMoreaux, Eds.), International Journal of Environment and Sustainability (Vol. 3). Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-16330-2
- Laguir, I., Marais, M., El Baz, J., & Stekelorum, R. (2018). Reversing the business rationale for banking. commitment in Decision, environmental Management 56(2),358–375. https://doi.org/10.1108/MD-12-2016-0890
- Law, M. M. S., Hills, P., & Hau, B. C. H. (2017). Engaging Employees in Sustainable Development a Case Study of Environmental Education and Awareness Training in Hong Kong. Business Strategy and the Environment, 26(1), pp.84-97. https://doi.org/10.1002/bse.1903
- Linh, D. H., & Anh, T. Van. (2017). Impact of stakeholders on the performance of green banking products and services: The case of Vietnamese banks. Economic Annals-XXI, 5(6), pp.143-151. https://doi.org/10.21003/ea.V165-29
- Masukujjaman, M., & Aktar, S. (2014). Green Banking in Bangladesh: A Commitment towards the Global Initiatives. Journal Technology of Business and (Dhaka), 8(1-2), 17–40. https://doi.org/10.3329/jbt.v8i1-2.18284
- Sahoo, B., Singh, A., & Jain, N. (2016). Green Banking In India: Problems And Prospects. International Journal of Research - Granthaalayah, 4(8), pp.92-99. https://doi.org/10.5281/zenodo.61169
- Samina, Q. S., & Hossain, M. N. (2019). Current Position of Banks in the Practice of Green Banking in Bangladesh: An Analysis on Private Sector Commercial Banks in Bangladesh. SSRN Electronic Journal. Retrieved from https://ssrn.com/abstract=3308682
- Sharifi, O., & Hossein, B. K. (2015). Green Banking and Environment Sustainability By Commercial Banks in. International Journal of Science Technology and Management, 4(11), pp294-304.
- Shaumya, K., & Arulrajah, A. A. (2016). Green banking practices of selected private sector banks in Sri Lanka. In 3rd Jaffna University International Research Conference (JUICE). University of Jaffna.
- Shaumya, S., & Arulrajah, A. (2017). The Impact of Green Banking Practices on Banks Environmental Performance: Evidence from Sri Lanka. Journal of Finance and Bank Management, 5(1), pp.77-90. https://doi.org/10.15640/jfbm.v5n1a7

- Shaumya, S., & Arulrajah, A. (2017). The Impact of Green Banking Practices on Banks Environmental Performance: Evidence from Sri Lanka. *Journal of Finance and Bank Management*, 5(1), pp.77-90. https://doi.org/10.15640/jfbm.v5n1a7
- Shenoy, G. P. R. S. S., Hebbar, C. K., & Prabhu, N. J. (2017). BRICS banking: review of green banking initiatives among the BRICS nations. In *7th International Conference on Restructuring of the Global Economy* (Vol. 9, p. pp.44-51). University of Oxford, UK. Retrieved from https://linkinghub.elsevier.com/retrieve/pii/S1364032112004182
- Stiftung, B. (2019). BTI 2018 | United Arab Emirates Country Report. Retrieved January 13, 2019, from https://www.bti-project.org/en/reports/country-reports/detail/itc/ARE/
- Tara, K., Singh, S., & Kumar, R. (2015). Green Banking for Environmental Management: A Paradigm Shift. *Current World Environment*, 10(3), pp.1029-1038. https://doi.org/10.12944/CWE.10.3.36
- The World Wide Fund forNature. (2010). UAE has world's largest environmental footprint. Retrieved December 6, 2018, from https://www.thenational.ae/uae/environment/uae-has-world-s-largest-environmental-footprint-1.525694
- Thombre, K. A. (2011). The new face of banking: Green banking. *Research Paper–Commerce*, 1(2), pp.1-4.
- Trehan, R. (2015). Green banking in India. *Journal of Poverty, Investment and Development*, 14(2), pp.27-32. Retrieved from http://academicjournals.org/journal/JEIF/article-abstract/7A7F42B49595
- UAE Ministry of Climate Change and Environment (MOCCAE). (2017). *UAE State of Green Economy report 2017*. *United Arab Emirates*. *Retrieved* from http://www.moccae.gov.ae/assets/e3bd136a/uae-state-of-green-economy-report-2014.aspx
- UAE Ministry of Environment and Water (MoEW). (2015a). State of Green Finance in the UAE The first national survey on contributions of financial institutions to Green Economy. Dubai, United Arab Emirates. Retrieved from www.moew.gov.ae
- UAE Ministry of Environment and Water (MoEW). (2015b). *United Arab Emirates State of Green Economy Report*. Dubai, United Arab Emirates.
- UAE SDGs. (2019). Build resilient infrastructure, promote sustainable industrialization and foster innovation. Retrieved February 4, 2019, from http://uaesdgs.ae/en/goals/industry-innovation-and-infrastructure
- Worldatlas. (2019). Countries With The Largest Ecological Footprints. Retrieved January 14, 2019, from https://www.worldatlas.com/articles/countries-with-the-largest-ecological-footprints.html
- Yin, W., Kirkulak-Uludag, B., & Zhang, S. (2019). Is financial development in China green? Evidence from city level data. *Journal of Cleaner Production*, 211, pp.247-256. https://doi.org/10.1016/j.jclepro.2018.11.106
- Zhixia, C., Hossen, M. M., Muzafary, S. S., & Begum, M. (2018). Green Banking for Environmental Sustainability-Present Status and Future Agenda: Experience from Bangladesh. *Asian Economic and Financial Review*, 8(5), pp.571-585. https://doi.org/10.18488/journal.aefr.2018.85.571.585