

Sustaining the Coast, Economy and Citizens
Through Planning: An Analysis of Resort
Development in Barbados

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Abstract

My portfolio comprises of five papers that discuss sustainable development in coastal regions on small island developing states through a planning perspective. I examined the cohesiveness of international, national, and regional planning and environmental policies and addressed how they are considerate to social, economic, and environmental conditions to reach sustainable goals.

After analyzing the themes and reviewing case studies, it is evident that these policies are at an adequate standard that can be applied for a more sustainable resort development industry. However, key concerns that can disrupt sustainable practices are the limited opportunity for building capacity for thorough implementation and the lack of accountability when developers abuse their power to leverage projects that do not meet policy standards.

Foreword

Three overarching issues with Barbados in the sustainable resort and planning context that justify why this research is imperative to the planning and development industry; 1) adverse impacts from climate change, 2) urbanization of coastal regions, and 3) the economy's dependence on tourism.

The portfolio also examines the following to reach triple bottom line sustainability strategies for Barbados resort developments:

- Effective planning policies, EIA principles, and laws that adequately considers the environment to mitigate climate change and;
- Corporate social responsibility practices in the resort industry from a national, regional and international perspective.

Introduction

My portfolio is a compilation of five papers that focuses on the overarching themes of sustainable development in coastal regions through planning and policy perspectives. Two longer papers address Planning in Barbados and Sustainability and Resort Development in Barbados. Both papers take on a variety of the most relevant and recent policies and legislation, and it relates to integrating social, economic, and environmental factors into planning or development decisions. Three other shorter papers are complementary subject matters to environmental consideration in sustainable development. There is a reflection piece regarding my experience working at the Canadian Urban Institute (CUI). I one project I worked on creating a model of international examples of best practices for waterfront development for Waterfront Toronto to adopt these approaches within their development plans. I also volunteered at an event called +Placemaker: Resilient Toronto. The new Chief Resilient Officer was announced and discussed the importance of establishing a Preliminary Resilience Assessment to determine the areas of focus for the Strategy from amongst the range of challenges facing the city. The second short paper focuses on a town hall meeting in Barbados for a desalination plant expansion. The last short paper touches on the future of children' involvement in planning through a workshop program at Evergreen BrickWorks. Lastly, a short audio interview that focuses on the Hyatt case study was created for the examination is available material.

The purpose of breaking down these common themes in separate papers allow the readers to concentrate on a particular issue about the regions' environmental, social and economic needs in the Canadian, Barbadian and the small island developing states (SIDS) context. An example is displayed in paper one, where planning policies are examined and are only applicable to the rules and regulations of Barbados. The Hyatt case study is a relevant topic that has gone up the legal system to the supreme court, which has local implications regarding how it would impact the landscape, biodiversity and due diligence on public engagement practices on the island. In the Canada context, a city like Toronto has competing priorities and require a provincially mandated assessment to highlight its unique issues to address the adverse effects of climate change.

However, these five papers are cohesive due to its common theme of sustainable development in coastal regions. Even though the coastline and weather conditions differ from the waterfront in Toronto, ON Canada from Bridgetown, St. Michaels Barbados both areas are facing similar extreme weather changes that are impacting the urbanization of its coastal region. These two regions are also actively attempting to respond to this crisis by adopting international standards and distilling initiatives to local needs. Lastly, in both cases the response to climate change and its impacts on development are being expressed through robust policies that have a holistic consideration of the environmental, social and economic concerns of its region specific challenges.

Paper # 1: Planning in Barbados

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Executive Summary

Small Island Developing States (SIDS) are disproportionately affected by climate change and natural disasters, when compared to their landlocked counterparts, especially when it comes to both quality of life for their citizens and economic productivity. As a result it is imperative that climate change and potential environmental distresses are at the forefront of discussion in urban planning and land development. This paper reflects on Environmental Impact Assessment (EIA) principles, national policies, and legislation as they relates to the contentious Hyatt Hotel resort project in Bridgetown, Barbados and how these factors can guide development to more considerate and sustainable outcomes to the economy, environment and society through implemented policies that hold others accountable. By examining the geographical baseline conditions of Barbados to identify the vulnerability of coastal regions and what role EIA principles play in mitigating these vulnerabilities when resort development projects are proposed, this paper will highlight the importance of EIA. Furthermore a discussion of the effectiveness of the Town and Country Planning Act CAP 240 (TCPA) laws and policies as they pertain to the Barbados Physical Development Plan (PDP) and development of SIDS in general will lead to an analysis of the decision-making process within the planning policy context.

1 Barbados Geography

1.1 Current Topography and Landscape

Barbados is the easternmost island along the Caribbean region of the Lesser Antilles. It measures at 430 km² and is located 13°10' north of the equator, and 59°32' west of

the Prime Meridian in the North Atlantic Ocean¹. The majority of Barbados, excluding the Scotland District region to the northeast, is made up of soft, 300 ft thick deposits of coral limestone. The Scotland District region which covers 15% of the island, however, has suffered complete deterioration of the coral floor due to erosion.² Here, the terrain is composed of rolling coral terraces ranging in height from sea level to the 1100ft at their highest. Barbados' coastline stretches to 97 km and coral reefs surrounds most of the island.

In comparison to some of its neighbouring islands, the variety in biodiversity in Barbados is limited. Poinciana, mahogany, frangipani, cabbage palm, and flowering shrubs are the most prevalent tropical plant species.³ Hares, monkeys, hummingbirds, mongoose, doves, sparrows, and egret are the common fauna of the region while flying fish, green dolphin, king fish, and parrot fish are typical marine life found in the surrounding body of water.

Over the last several decades it is evident that the landscape has shifted due to increased erosion, coral reduction, infrastructure development and extreme weather conditions from climate change. But what effect have these environmental shifts had on the social and economical factors of Small Island Developing States (SIDS) like Barbados?

¹ Government of Barbados Geography. (n.d.). Retrieved July 30, 2019, from <https://web.archive.org/web/20091113144521/http://www.barbados.gov.bb/geography.htm>

² Barbados | History, People, & Facts. (2019b, July 23). Retrieved July 30, 2019, from <https://www.britannica.com/place/Barbados>

³ ibid

1.2 Coastal Cities and Climate Change

Historically, human settlement has been concentrated in coastal zones. A *Coastal zone* is defined as; “the interface between the land and water”.⁴ It is essential to evaluate coastal zones in talks of development and city planning, as the majority of large cities are in coastal territory due to the economic benefits from the access to ocean navigation. According to the United Nations (UN) Environmental Programme ‘The Cities and Coastal Areas’, half of the world’s population - approximately 3.5 billion - live within 60km of the sea, and three-quarters of all large cities are located in coastal areas.⁵ As a result of the complex interaction between land and ocean, there are continuous gradual changes along the coast. Waves and winds both erode rock and deposit sediment on a regular basis, and rates of erosion and deposition vary considerably from day to day in these zones.⁶ During storms, energy from tides, currents, and waves reach the coast and commonly have adverse impacts on urban and rural development, making coastal zones areas of high vulnerability to natural disasters. As such, an understanding of the interactions of the ocean and the land is essential in comprehending the hazards associated with coastal zones.⁷

On the international and scientific stage, global warming has been identified as a global crises that requires immediate efforts from all patrons to reduce carbon emissions

⁴ Mega, V. (2016). *Conscious Coastal Cities: Sustainability, Blue Green Growth, and the Politics of Imagination*. Switzerland: Springer International Publishing.

⁵ ibid

⁶ ibid

⁷ ibid

while increasing sustainable practices to shift societal behaviours. It is imperative that aggressive measures for carbon reduction be applied to ensure the Earth's temperature remains under 2°C or we will continually experience an increased frequency and severity of weather conditions that will not only have negative societal implications (i.e health concerns from air pollution or water contamination) but will also directly affect the economy at large (i.e. higher operational costs, flood mitigation, reduced raw materials). Panmao Zhai, Co-Chair of International Panel on Climate Change (IPCC) Working Group I, highlights an important point from the IPCC 2018 Report: "One of the key messages that comes out very strongly from this report is that we are already seeing the consequences of 1°C of global warming through more extreme weather, rising sea levels and diminishing Arctic sea ice, among other changes,"⁸ Expanding on the sensitive regions of coastal cities, it has also been emphasized by the IPCC (2001b, p. 17.5) that "Small Island States constitute a very high-risk group of countries as a consequence of their high vulnerability and low adaptive capacity."⁹ SIDS are the most susceptible to climate change disruption, and as they are not in the privileged position to conduct business as usual in times of environmental crisis, climate change directly impinges on the quality of life for their citizens. In the UN's Urbanization and Climate Change in SIDS 2015 report, lack of resilience and high exposure to natural disasters were identified as one of many other

⁸ IPCC Intergovernmental Panel on Climate Change. (2018, April 24). [Press release]. Retrieved from https://www.ipcc.ch/site/assets/uploads/2018/11/pr_181008_P48_spm_en.pdf

⁹ Belle, N., & Bramwell, B. (2005). Climate Change and Small Island Tourism: Policy Maker and Industry Perspectives in Barbados. *Journal of Travel Research*, 44(August). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1022.4399&rep=rep1&type=pdf>

challenges unique to SIDS, while tourism was displayed as an opportunity (Appendix 1).¹⁰

Recently, there has been a change in perspective on who are the major players in reducing carbon for mitigation and adapting to climate change impacts. Cities appear to be in the forefront on adopting sustainable practices and are in a position to directly benefit from these practices; whether that be decreased reconstruction costs from resilient city design or improved waste management operations that encourages composting and the recycling of more materials. At the UN Conference on Sustainable Development, Rio+20 cities were among the main actors in the global commitment towards the enhancement of sustainable development. The Rio+20 conference focused on how rapid urbanization is breeding an enormous concentrated demand for natural resources, water supplies, sanitization, energy and transport infrastructures and services.¹¹ However, it is also crucial to note that cities account for 2% of the Earth's land, yet account for 60%-80% of energy consumption. Coastal cities come in a variety of topographies with various demographics, population and culture so when shifting the analysis of climate change to cities in the Caribbean, there are specific vulnerabilities that must be underscored and taken into consideration when seeking to mitigate adverse effects and create adaptive solutions.

1.3 Climate Change Impacts and Barbados

¹⁰ UN Habitat. (2015). *Urbanization and Climate Change in Small Island Developing States*. Retrieved from <https://unhabitat.org/urban-initiatives/initiatives-programmes/cities-and-climate-change-initiative/>

¹¹ <https://sustainabledevelopment.un.org/rio20>

IPCC used general circulation models (GCM) to simulate how the Earth would respond to increased greenhouse gas (GHG) emissions. The outcome of analyzing these trends developed five key predicted changes for Barbados in the next 50 years:

- Air temperature is expected to rise 1°C to 2°C (Appendix 2)
- Overall rainfall is expected to be reduced
- Rainfall intensity may increase by up to 45%
- Sea level rise of 0.2 to 0.4 metres
- A possible increase in hurricane intensity of 2% to 11%¹²

These highly probable trends will have physical implications which can lead to the following environmental adverse effects:

- Rise in sea level that could reduce beach widths.
- Increase in saline intrusion (migration of seawater) into the freshwater aquifers from which Barbados draws its drinking water.
- May reduce rainfall amounts that could increase the frequency and severity of droughts
- May increase rainfall intensity that can increase flooding¹³

¹² Climate Change – Barbados Climate Change. (n.d.). Retrieved July 30, 2019, from <http://project29.live/climate-change/>

¹³ Climate Change – Barbados Climate Change. (n.d.). Retrieved July 30, 2019, from <http://project29.live/climate-change/>

The impacts from climate change can also devastate the economy. Barbados' key economic drivers are tourism, the international business sector, and foreign direct-investment. In 2018, Barbados tourism sector contributed to 18.8% of the national GDP.¹⁴ Tourism is not evenly distributed across the island and this intensification causes physical strain to environment. As displayed in Appendix 3, the west and south coast of the island host the majority of the tourism accommodations. This is a prime example of; “the non-sustainability of a fragile island microstate embracing large- scale mass tourism in what is nearly a policy and planning vacuum”.¹⁵ Although Barbados has been fortunate to have limited experiences with extreme natural disasters - the last hurricane recorded was Hurricane Janet in 1955 - the recent growing concern from increasing greenhouse effects recorded by the *First National Communications to the United Nations Framework Convention on Climate Change* Report highlight three projected trends that could have significant consequences for tourism: sea-level rise (and its attendant impacts of erosion, inundation, and saline intrusion), elevated air and sea temperatures, and changes in weather patterns (notably, changes in the volume and seasonality of rainfall, and changes in storm frequency and intensity).¹⁶

¹⁴Central Bank Press Release December 2018. (n.d.). [Press release]. Retrieved July 30, 2019, from <http://www.centralbank.org.bb/Portals/0/Press+Release+Dec+2018v14.pdf>

¹⁵ Belle, N., & Bramwell, B. (2005). Climate Change and Small Island Tourism: Policy Maker and Industry Perspectives in Barbados. *Journal of Travel Research*, 44(August). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1022.4399&rep=rep1&type=pdf>

¹⁶ibid

Climate change can also adversely affect the social fabric of the island. The labour market and the vulnerable, impoverished population would be most at risk to a degraded quality of life from extreme shifts of weather conditions or more frequent natural disasters. With a population of 274,00, 44.4% of residents live in urban environments, while 55.6% reside in rural regions.¹⁷ 267,000 of those people live in an area of only 431km², making it one of the ten most densely populated countries in the world.¹⁸

Isabell Kempf, the co-Director of the UNDP-UNEP Poverty-Environment Initiative writes in a 2018 report that current management of land-use sectors (i.e. infrastructure development) contribute to 25% of the world's greenhouse gases and that land degradation is both a cause and a result of poverty.¹⁹ "Land degradation contributes to climate change and increases the vulnerability of millions of people, especially the poor, women, and children".²⁰ Therefore, keeping these factors in mind, there is an inarguable concern regarding the magnitude of the adverse effects due to climate change. It is certain that climate change can and will disrupt the livelihood of residents, the environment, and the economy of the island.

¹⁷ UN Habitat. (2015). *Urbanization and Climate Change in Small Island Developing States*. Retrieved from <https://unhabitat.org/urban-initiatives/initiatives-programmes/cities-and-climate-change-initiative/>

¹⁸ Belle, N., & Bramwell, B. (2005). Climate Change and Small Island Tourism: Policy Maker and Industry Perspectives in Barbados. *Journal of Travel Research*, 44(August). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1022.4399&rep=rep1&type=pdf>

¹⁹ Kempf, I. (2018). *Poverty and the environment/climate change*. Retrieved from <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2018/05/9.pdf>

²⁰ Ibid

2 Environmental Impact Assessment and Hyatt Centric Hotel

2.1 EIA Best Practice Principles

For the purpose of the paper's national focus, the understanding of EIA is in reference to the Government of Barbados' Coastal Zone Management Unit definition.

They define EIA into three key factors:

- A process by which the consequences of planned development projects are evaluated as an integral part of planning the project.
- The analysis of biological, physical, social and economic factors to determine the environmental and social consequences of a proposed development action.
- The goal of the EIA is to provide policy makers with the best available information in order to minimize economic costs and maximize benefits associated with a proposed development.²¹

Because coastal cities and SIDS, including Barbados, are exceptionally vulnerable to climate change risks, effective EIA must be a consistent and prioritized tool when developing resort/tourism infrastructure. EIA effectiveness is therefore defined for the purposes of this study as the degree to which the EIA process has achieved the

²¹ Environmental Impact Assessment (EIA) | Coastal Zone Management Unit. (n.d.). Retrieved July 30, 2019, from <http://www.coastal.gov.bb/content/environmental-impact-assessment-eia>

intended objective of improving the quality of decisions regarding proposals.²² EIA can be an effective tool but it is important to showcase the realities and challenges that SIDS experiences when adopting EIA which is fully described in Appendix 4. There are challenges that can arise for SIDS. Typical EIA used internationally is made up of 10 stages; Project Design, Considerations of Alternatives, Screening, Scoping, Impact Analysis & Preparation of EIA Report, Consultation and Participation, Mitigation, Review of an EIA Report & Decision Making, Project Outcome, and Monitoring.²³

The International Association for Impact Assessment (IAIA) established in 1980, is the leading global network on best practice in the use of impact assessment for informed decision making regarding policies, programs, plans and projects.²⁴ When an EIA is conducted there are 14 principles of EIA best practices (Appendix 5) that provide a more robust, dynamic, balanced and thoughtful approach to development. Applying these principles would have long-term benefits to all stakeholders involved and could reduce legal battle and negative reputation on such approved proposal. Naturally, all 14 principles are equally valuable considerations; however in the Hyatt case, if they were legally obligated to complete an EIA, it would have been in the best interest for the proponent to focus its efforts towards satisfying the *Adaptive, Participative, Credible, Integrated and Transparent* principles.

²² Gilbert, L. (2006). *An Evaluation of Environmental Impact Assessment in Barbados*. Retrieved from https://curve.carleton.ca/system/files/etd/ca241c0c-f939-4e0b-b5c9-15dfc84dbf50/etd_pdf/13b630d87b4f1524da739b33c9320f10/gilbert-anevaluationofenvironmentalimpactassessment.pdf

²³ Ibid

²⁴ About IAIA. (n.d.). Retrieved July 30, 2019, from <https://www.iaia.org/about.php>

In this case *Adaptive* suggests that EIA should be adapted to the realities, issues and circumstances of the proposals under review without compromising the integrity of the process.²⁵ The realities in the Barbadian context are the economic reliance on tourism for capital gain, the increase in extreme environmental conditions and the protected site on the proposed plot. It would be imperative that the developer respect the economic needs in a vulnerable climate while respecting the heritage of the site. The project should reflect and respect these realities in its design. Perhaps the current Prime Minister of Barbados, Mia Mottely, should reevaluate the idea of expanding the project and instead reduce its size and increase the amount of green or biophilic infrastructure to the design.

Participative suggests that the process should provide appropriate opportunities to inform and involve interested and affected stakeholders, and having their input and concerns incorporated in the EIA documentation and decision making stage.²⁶ The lack of opportunity for public engagement on such a central and meaningful plot to locals and returning visitors was truly the catalyst to legal action from local lawyers and activist, David Comissiong representing the public's interest in this case. Having an enforced EIA that supports public consultation is a more efficient way to decrease lengthy processes and road blocks further down the line, and to break ground faster. It can also greatly impact the developer's reputation whether a community would work with them on future projects.

²⁵ IAIA. (1999). *Principles of Environmental Impact Assessment Best Practice*. Retrieved from https://www.iaia.org/uploads/pdf/principlesEA_1.pdf

²⁶ Ibid

Credible, in this instance, means the process should be carried out with professionalism, fairness, objectivity, and balance.²⁷ Former PM Freudal, public servants from TCDPO, Hyatt Executives and developer representatives should have applied an EIA within an appropriate time frame to display fairness to avoid legal and media scrutiny which would have anchored their credibility to the public's eye.

Integrated suggests EIA should address the interrelationships of all social, economic and biophysical aspects.²⁸ This complex analysis of all three aspects mirrors the triple bottom-line goal of corporate social responsibility that justifies the business case for sustainability in an industry such as resort development. Integrating these factors fundamentally creates a sustainable economy that does not threaten the finite product of the natural environment in which the livelihood of resident and government services heavily rely on.

Lastly, *Transparent* suggests the process should have clear, comprehensible requirements for EIA content, ensure public access to information, identify the factors that will be considered during decision making, and acknowledge limitations.²⁹ DRS 360 Hospitality Lab, a design, development and project management firm, is one of the critical stakeholders in the development and design of the Hyatt Centric Hotel. Apart

²⁷ Ibid

²⁸ IAIA. (1999). *Principles of Environmental Impact Assessment Best Practice*. Retrieved from https://www.iaia.org/uploads/pdf/principlesEA_1.pdf

²⁹ Ibid

from the opportunities EIA can provide to this project, DRS 360 has the responsibility to disclose more information to the general public. Currently, their site only has the layout (Appendix 6) of the restaurant, pool, main floor and rooms but provides zero information on the measurements of the plot or its general land-use plan of the project. As it stands, the public still does not have clarity on the details of the project which goes against this principle. If the court rules in favour for an EIA to be an enforced step in the development process, honing in on these 5 out of 14 principles can drastically improve the quality of the project and gain a social buy-in that has long term reputational impacts for being a leader in sustainable hotel projects that can create a promising niche market within the Caribbean and possibly in other SIDS around the global.

2.2 Hyatt Centric Hotel Development- Case Study

As previously stated, Barbados is a renowned tourist destination with approximately 1.3 million international visitors in 2017.³⁰ There is regular interest to expand the resort portfolio with proposals because developing more hotels on the island would benefit local small/medium businesses, and would increase job creation and capital for the government at large. According to the Barbados Sustainable Recovery Plan 2018 Report by The Economic Affairs Division in the Ministry of Finance and Economic Affairs Department a Strengths, Weakness, Opportunity and Threat

³⁰ Barbados TMI, Annual Report 2017, p. 7

(SWOT) Analysis highlighted that construction delays for tourism is a threat to Barbados' economic agenda.³¹ However, resort development has its environmental and social drawbacks as seen in the Hyatt Centric Hotel development.

In 2016, a controversial \$100 million Hyatt Centric Hotel development on Bay Street in Bridgetown, St. Michael was approved without an Environmental Impact Assessment (EIA) or adequate public participation.³² It is also significant to note that the area of the proposed plots are already UNESCO-designated World Heritage site. What initially started off as a 15 storey, 237 room resort on two plots has, as of summer 2019, been proposed by the new Prime Minister (PM), Mia Mottely, as a 15 storey, 237-350 room resort on three or four plots.³³

There is uncertainty with regard to the full extent of the details to this project due to a lack of transparency from the local developer, Vision Developments Inc., and architecture firms SB Architect and DRS 360 Hospitality Lab. Mark Maloney, Director of Vision Developments Inc., boasts of creating 300-400 jobs of the course of the 2-year construction and has full support from the Minister of Tourism, Richard Sealy, whose stance on the matter is that attracting brands to the island's shores could only

³¹Economic Affairs Division Ministry of Finance and Economic Affairs. (2018). *Barbados Sustainable Recovery Plan: A Framework for Barbados National Economic and Social Development Restructuring and Enhancement Programme*. Retrieved from <https://www.barbadosparliament.com/uploads/sittings/attachments/c588a8632f9a10e0f8f25c32c564696b.pdf>

³² Madden, M. (2017, July 20). Sutherland: What about the EIA on Hyatt? Retrieved October 29, 2017, from <https://www.barbadostoday.bb/2017/07/19/sutherland-what-about-the-eia-on-hyatt/>

³³ Joseph, E. (2019, June 19). Hyatt Appeal in Court. *Barbados Today*. Retrieved from <https://barbadostoday.bb/2019/06/19/hyatt-appeal-in-court/>

bode well for the future of the tourism industry.³⁴ However, a concerningly minimal amount of communication from government and proponents on the environmental effects and the cultural implications building on a designated heritage site has been shared with the public.

Approval for the project was granted by both Freundel Stuart, the former Minister of Town and Country Development Planning Office (TCDPO), a department of government responsible for the implementation of the Town and Country Planning Act (TCPA), and the PM of Barbados. This decision puts the country at serious risk for an unsustainable economy as well as creating environmental and social concerns. Local activist, CARICOM Ambassador, and attorney David Comissiong, took legal action and filed for a judicial review of the permissions granted by Stuart to Hyatt developer Maloney for the construction of the hotel based on a perceived failure by Maloney to carry out an EIA at the construction site.³⁵ To date, construction has yet to commence due to the legal battle which has gone up to the Supreme Court level. In December 2017, Justice Sonia Richards ruled in Comissiong's favour and granted him legal standing to challenge Stuart's building permission to Vision Developments Inc. The ruling was on the basis of Barbados' TCPA, which is a piece of legislation that dictates provisions for the orderly and progressive development of land in both urban and rural areas and to preserve and improve the amenities thereof.³⁶ The Court acknowledged:

³⁴ Belgrave, J. (2016, July 27). Hyatt Signing Complete. *Barbados Advocate*. Retrieved from <https://www.barbadosadvocate.com/news/hyatt-signing-complete>

³⁵ Barbados Today. (2019, April 2). Follow the law on Hyatt. *Barbados Today*. Retrieved from <https://barbadostoday.bb/2019/04/02/follow-the-law-on-hyatt/>

³⁶Town and Country Planning Act of 1985 Chapter 240

“Comissioning was a person aggrieved by the granting of the permission, and that under the Administrative Justice Act Comissioning was a person whose interest was adversely affected by the decision to grant permissions and also that there was sufficient public interest in whether the granting of building permission is correct or incorrect”.³⁷

On July 18th, 2019, Comissioning actively participated in a town hall meeting for another proposed hotel development, Blue Horizon Hotel whose plot is along a waterfront site. He vocalized through media outlets his concerns regarding the credibility of TCDPO holding a town hall meeting for a smaller project like the Blue Horizon Hotel project but refusing to host a single opportunity for public engagement for the Hyatt Centric Hotel development.³⁸ The lack of consistency and approach to resort development approval process can have a lasting effect of resentment to communities and it can create a rapid deterioration of the very same landscape that attracts its tourists in the first place.

The final outcome from the Hyatt case may lead to a regional or potentially international precedent for SIDS in similar economic reliance on tourism and make EIA

³⁷ Smith, C. (2017, December 20). Comissioning Comes Out on Top in Hyatt Ruling. *Loop News Barbados*. Retrieved from

<http://www.loopnewsbarbados.com:8080/content/comissioning-comes-out-top-hyatt-ruling>

³⁸ Mounsey, C. (2019, July 20). Comissioning Wants Answers from Town Planning. *Barbados Today*.

Retrieved from <https://barbadostoday.bb/2019/07/20/comissioning-wants-answers-from-town-planning/>

and public participation a stricter tool in the implementation process for not just lawful but also sustainable practices in the resort development sector.

2.3 Town and Country Planning Act

The TCPA: Chapter 240 is a legal document that outlines the rules and regulations regarding all planning across the island. They have their own national obligations for public engagement for development proposals that was not respected in the approval process. Section 9.4 states:

(4) Before approving any development plan or proposals for the amendment of any such plan, the Minister shall cause to be published in three issues of the Official Gazette and of at least one newspaper published in the Island a notice

(a) stating that a development plan, or proposals for the amendment of such a plan, have been prepared by the Chief Town Planner;

(b) naming the place or places where copies of the plan or proposals may be inspected and purchased by the public ; and

(c) stating the time (being not less than twenty-eight days from the last publication of such notice in the Official Gazette) within which objections or representations may be made to the Minister with respect to the plan or proposals.³⁹

³⁹ Town and Country Planning Act of 1985 Chapter 240

These provisions which would have allowed the opportunity for public awareness were not implemented, which in turn builds a strong case for Commission's accusations towards Stuart. Leadership who do not comply with the law inarguably must be held accountable to create developments that hold the utmost high sustainability standards in the most vulnerable regions in the world.

3 Barbados Planning

3.1 Town and Country Development Planning Office

TCDPO mission statement is; "To ensure that all members of the public are accorded an efficient and timely planning service in order to provide the best physical environment possible for the island".⁴⁰ The main functions of the TCDPO include: (i) responsibility for the development and implementation of national policy on land use and physical planning in Barbados; (ii) ensuring compliance with relevant land use and physical development policies (e.g. the TCPA and the NPDP); (iii) evaluating applications for new developments for compliance with relevant policies and standards; and (iv) overseeing the EIA process and inter-governmental EIA Review Panels for development applications that require submission of an EIA.⁴¹ The planning

⁴⁰ Town & Country Development Planning Office. (n.d.). Retrieved July 30, 2019, from <http://www.townplanning.gov.bb/index.aspx>

⁴¹ UNCED Commission on Sustainable Development. 2002. Country Profile: Barbados, [online] Accessed November 2, 2005. <http://www.un.org/esa/agenda21/natiinfo/wssd/barbados.pdf>

office acknowledges its dedication to the physical environment as a priority which also brings meaning to Commissioning's objections to the approval of the Hyatt without proper due diligence.

In order for the TCDPO to manage competing priorities of the environment, economic growth, and society through planning, the TCPA: Cap 240 and the Town and Country Planning Development Order 1972 were created to provide standards, consistently and order for sustainable development on the island. EIA is not actually embedded within its own specific legislation but is viewed as a legal requirement indirectly through the TCPA, which establishes the application and approval process for proposed developments on rural and urban lands.⁴² The Chief Town Planner has the ability to request an EIA for development applications indirectly via Section 17(1), which authorizes the Chief Town Planner to request applicants to provide information deemed necessary in support of an application.⁴³ EIA is therefore a requirement of the development planning process in Barbados indirectly through the TCPA.⁴⁴

3.2 Physical Development Plan

⁴² Gilbert, L. (2006). *An Evaluation of Environmental Impact Assessment in Barbados*. Retrieved from https://curve.carleton.ca/system/files/etd/ca241c0c-f939-4e0b-b5c9-15dfc84dbf50/etd_pdf/13b630d87b4f1524da739b33c9320f10/gilbert-anevaluationofenvironmentalimpactassessment.pdf

⁴³ Ibid

⁴⁴ Ibid

TCDPO uses the PDP as a broad administrative policy tool to chart settlement, growth patterns and the allocation of land to various uses.⁴⁵ However, this document is not the sole determinant of the decision-making process. There are three land designations within the PDP that are relevant considerations to this case. Section 3.4: Mixed Use, Section 3.6 Tourism and Section 3.13: Golf Courses all include hotels as a permitted building. There can be potential for confusion regarding the true provisions around what type of hotel development would abide by which land designation policy. For example it is indicated in Section 3 which industries require an EIA and though hotel are not specifically highlighted hotels are slotted as a permitted use under Golf Course areas in Section 3.31.1: Permitted Uses and if a golf course with a hotel on its ground was proposed an EIA would be required. Section 3.6: Tourism requires development to comply with the Coastal Zone Management Plan that include strategies for adaptation and disaster risk management to new developments and possibly Transportation Assessment if requested by the Chief Town Planner.⁴⁶ However, it is not legally required for an EIA for hotel development in a Tourism land designation. Appendix 7 displays a 2016 map of the nation's land use designations.

⁴⁵ Town & Country Development Planning Office. (n.d.-b). Retrieved July 30, 2019, from <http://www.townplanning.gov.bb/content.aspx?c=2>

⁴⁶ Town & Country Development Planning Office. (2017). *Land Use and Built Form Policies*. Retrieved from http://www.townplanning.gov.bb/pdp/Downloads/files/pdp/A-03_Land%20Use%20and%20Built%20Form%20Policies.pdf

The Hyatt Hotel's proposed plot sits on a Community Planned Area, which falls under Section: 7 of the PDP. Section 7 focuses on the direction for the Bridgetown community core and is designed to be read in conjunction with the national PDP policies. It provides a framework for continued investment and development in Bridgetown as Barbados' National Centre.⁴⁷ Section 7.4.2: Goals and Objectives mention the significance to recognize and protect the heritage assets within the UNESCO World Heritage Site and in Section 7.8.24 claims that redevelopment along Carlisle Bay will consider the historic character of the street and its significance to the UNESCO World Heritage Site, in particular the connection between the Core (mercantile and administration) and the Garrison (military).⁴⁸ Section 7.5.6: Promoting Sustainable Development states all major development within the Bridgetown Community Plan area shall seek to implement design excellence and sustainable, resilient development that considers and contributes to the objectives at the site, surrounding context and precinct area scale. However, the Hyatt project did not articulate specific highlights of sustainable/green standards in its infrastructure design nor did it justify how a new building in the space respects Section 7.5.1 that focuses the redevelopment of vacant and underutilized land and adaptive reuse of older buildings to create an opportunity to optimize existing infrastructure, shore up vacancies and gaps as a sustainable approach to development⁴⁹ These policies are strong protective policy language but the Hyatt project only seems to satisfy one of the

⁴⁷ Town & Country Development Planning Office. (2017a). *Bridgetown Community Plan*. Retrieved from http://www.townplanning.gov.bb/pdp/Downloads/files/pdp/B-07_Bridgetown.pdf

⁴⁸ Ibid

⁴⁹ Ibid

many other goals of the PDP, that is to promote redevelopment of key sites for tourism investment including hotels, restaurants, attractions and coastal open spaces.⁵⁰ This singular level of tourism promotion for the economy is short-term gain that doesn't tackle the more robust and comprehensive PDP that lays out an adequate level of consideration the design and balance of national planning.

4 Institutional- Ideological Approach to Decision-Making for the Hyatt Case

Finally we evaluate the decision-making for the Hyatt Hotel through an Institutional- Ideological Approach theory. The theory is a well-described evaluation of relevant considerations that determine a solution for the public realm.

Institutional-Ideological Approach has four factors: Institutional Structure, Societal Interest, and Actors, Physical and Economic, and Ethics and Procedural Norms.⁵¹

Institutional Structure identifies the type of current government system or body that the decision falls under. The Town and Country Development Planning Office is a state body with a Chief Planner and PM that makes final approvals. Societal Interest and Actors identifies the significant stakeholders that influence decisions. Physical and Economic factors in considerations like Barbados' dependence on tourism and limited land capacity for resort development on small island states. Finally, Ethic and Procedural Norms mandate that policy "interests" are based on ethical and procedural

⁵⁰ Ibid

⁵¹ Hessing, M.Howlett and T.Summerville, "The Institutional Context, Canadian Natural Resource and Environmental Policy: Political Economy and Public Policy (Vancouver: UBC Press, 2005)

norms, and values what relevant actors bring to the political process.⁵² Though the current government has progressive ideologies on environmental policies, sustaining the tourism economy is deeply embedded within their ethical institutional standards. However, as evidenced in the 2017 decision to amend their Physical Development plan to use more progressive language that supports the environment, that is evidence of an ongoing shift in the fundamental ideology of the Town and Country Development Planning Office. It is this shift that has made the Hyatt case so controversial. “Activist or progressive governments, by contrast, may see their role as more directive in shaping the economy and society... such governments typically aspire to foster more just or environmentally sustainable societies”.⁵³ This is a valuable theory because it can thoroughly analyze a policy from critical perspectives that inform decision-makers.

5 Conclusion

Barbados’ beautiful landscapes, stable government, and rich culture continue to drive tourists to experience a great snapshot of the Caribbean region. Even though they have been fortunate to avoid recent major natural disasters, they are still vulnerable to climate change impacts that have negative impacts on the economy, community, and environment. Continuing hotel development as ‘business as usual’ will threaten the livelihood for future generations and long term outcomes for economy to come so it is integral for a member from society like activist Commissioning to stand up

⁵² Hessing, M.Howlett and T.Summerville, “The Institutional Context, Canadian Natural Resource and Environmental Policy: Political Economy and Public Policy (Vancouver: UBC Press, 2005)

⁵³ Winfield, M., Blue-Green Province: The Environment and the Political Economy of Ontario (Vancouver: UBC Press 2012) Chapter 1 “Introduction,” pp.3-9, Chapter 8 “Conclusions”

against processes that are failing the environment and residents rights to engage. After examining the various policy-based approaches to planning, Barbados is in a favorable but delicate position for sustainable development. The outcome of the Hyatt case can indeed have long-lasting impacts on how EIA is considered across the Caribbean and other SIDS in similar economic dependency on tourism. EIA and its public engagement processes will be seen as a profound tool to mitigate environmental impacts or merely a box to check.

APPENDICES

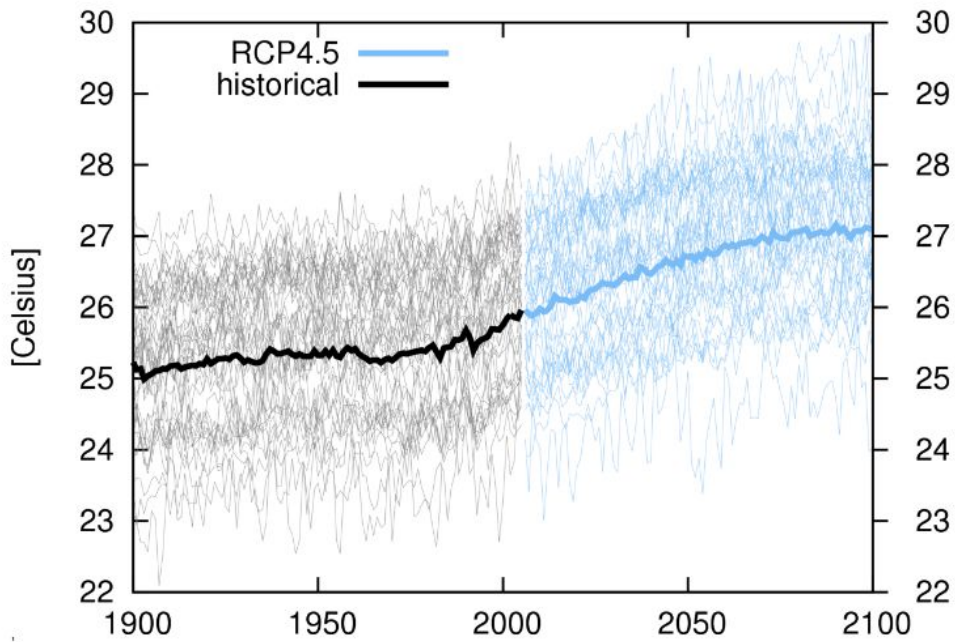
Appendix 1: Common Challenges and Opportunities Facing SIDS ⁵⁴

TABLE 01: **Common Challenges and Opportunities facing SIDS**

Challenges	Opportunities
▪ Narrow resource base limiting the benefits of economies of scale	▪ Aquaculture and Fisheries
▪ Small domestic markets and heavy dependence on a few external and remote markets	▪ Maritime “Blue” Economy
▪ High costs for energy, infrastructure, transportation, communication, and servicing	▪ Tourism
▪ Long distances from export markets and import resources	▪ Renewable Energies, (esp. wind & solar)
▪ Low and irregular international traffic volumes	▪ Biodiversity
▪ Little resilience and high exposure to natural disasters	▪ Ecosystem-based adaptation
▪ Rapidly growing populations	
▪ High volatility of economic growth	
▪ Limited opportunities for private sector and a proportionately large reliance on public sector	

⁵⁴ UN Habitat. (2015). *Urbanization and Climate Change in Small Island Developing States*. Retrieved from <https://unhabitat.org/urban-initiatives/initiatives-programmes/cities-and-climate-change-initiative/>

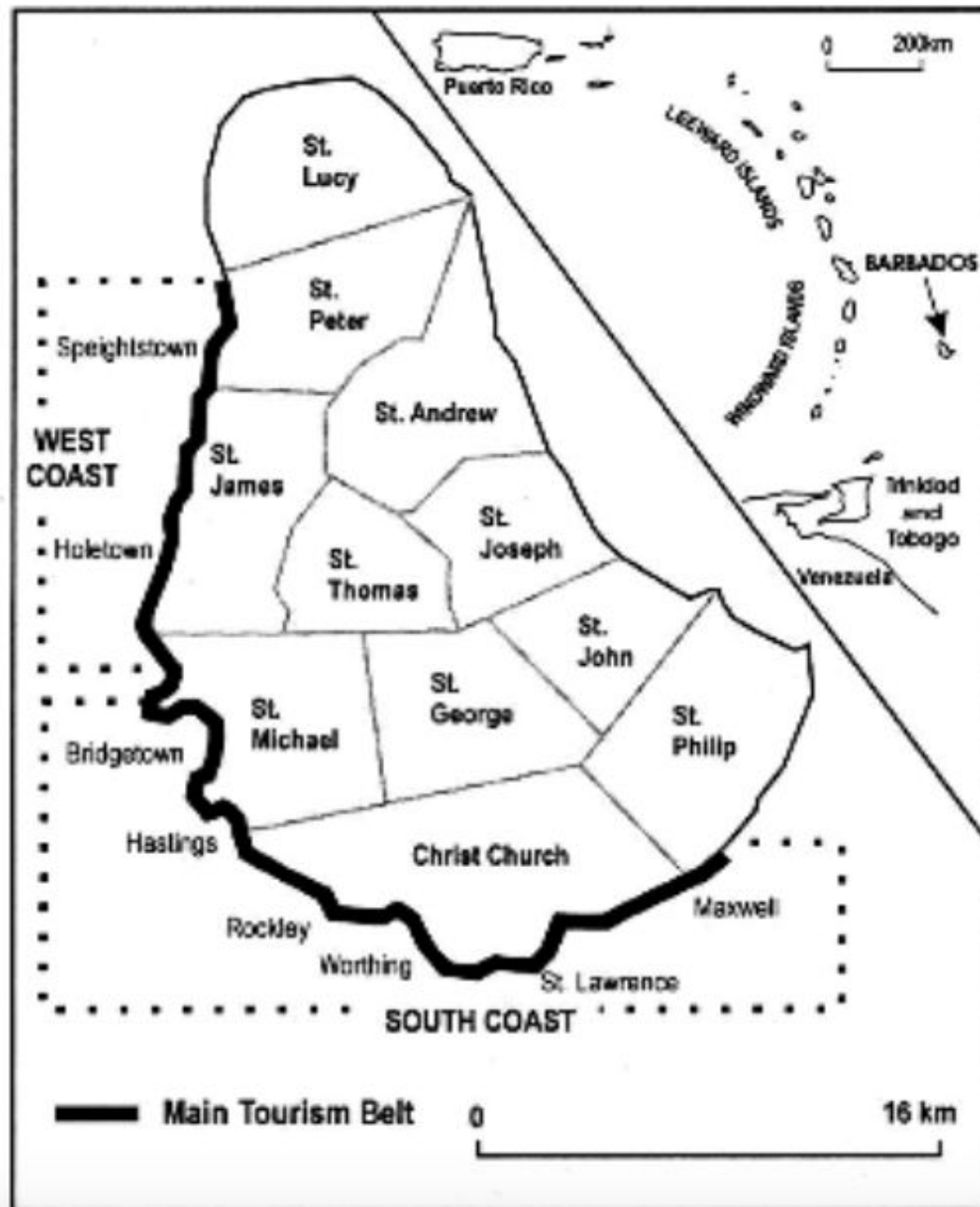
Appendix 2: Increased Air Temperature in Barbados ⁵⁵



Predicted future air temperatures in Barbados

⁵⁵ Climate Change – Barbados Climate Change. (n.d.). Retrieved July 30, 2019, from <http://project29.live/climate-change/>

Appendix 3: Barbados Main Tourism Belt ⁵⁶



⁵⁶ Belle, N., & Bramwell, B. (2005). Climate Change and Small Island Tourism: Policy Maker and Industry Perspectives in Barbados. *Journal of Travel Research*, 44(August). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1022.4399&rep=rep1&type=pdf>

Appendix 4: Eight Challenges Developing Countries Experience for Effective EIA

- *Weak legal basis for EIA:* The legal basis for EIA may be weak or non-existent. Implementing regulations may be non-existent or may impose unrealistic requirements. Implementing agencies are often young, under-funded, lack political authority and frequently operate in an environment where sharing of information is deficient.
- *Inconsistent application and coverage of EIA:* Screening of proposals is commonly weak and demand for EIA may be limited. EIAs may not be required unless development agencies are involved in a proposal and therefore exert their own requirements for EIA.
- *Insufficient consideration of alternatives:* The analysis of alternatives to the proposal is commonly weak.
- *Poor quality EIA reports:* The quality of EIA reports prepared within developing countries has generally been substandard compared to EIA practice in developed countries. Alternatives analysis, presentation of relevant baseline data, impact analysis and prediction, and attribution of significance are identified as some of the most common areas of weakness.
- *Weak EIA review and decision-making:* The review stage may be poorly conducted or nonexistent in some countries.
- *Weak or non-existent mitigation and monitoring:* Mitigation measures outlined in the EIA and EMP are not always undertaken. Monitoring by governmental officials is

identified as a serious shortcoming, and is largely attributed to insufficient financial and human resources.

- *Minimal participation:* Public participation may largely be informative in nature rather than truly participative. Public input may be sought in order to meet a "checklist" requirement but may have little overall impact on the EIA process and resulting decisions. Public consultation is often inequitable and unrepresentative, and, in some cases, may not be considered culturally appropriate. (continued)

(Figure 3 continued)

- *Benefits and costs of EIA systems:* The financial costs of EIA and the delays that are incurred as a result of the EIA process are viewed as burdensome to project proponents.

Derived from: Alzina, 2001; Barrow, 1997; Biswas et al. 1987; IDB, 2001a; Wood, 2003b.

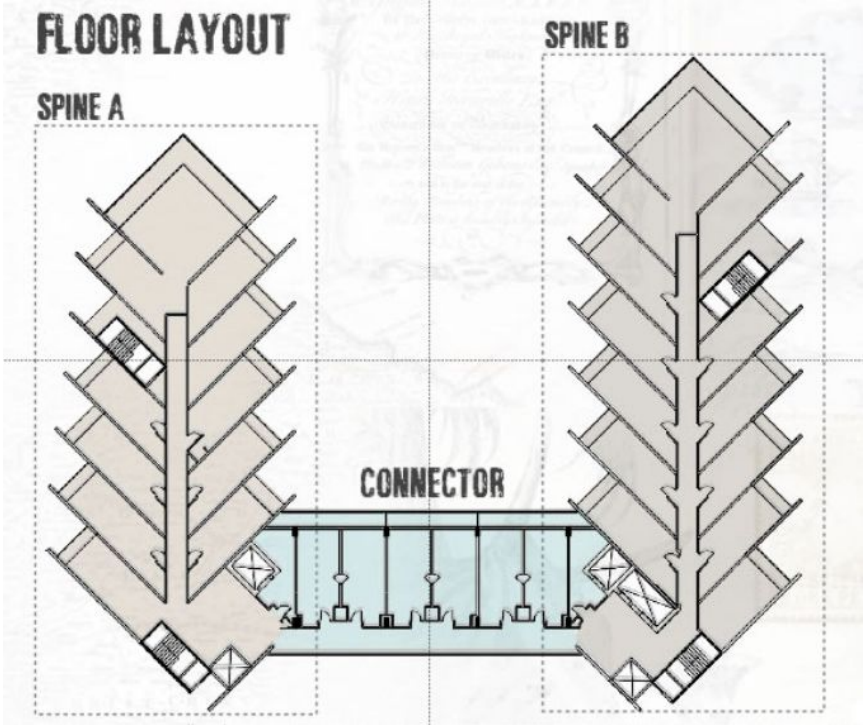
Appendix 5: IAIA Basic Principles of EIA Best Practices⁵⁷

IAIA Basic Principles of EIA Best Practice	Description
Purposive	EIA should inform decision makers and result in environmental protection.
Rigorous	The EIA process should apply best practicable science and appropriate methodologies.
Practical	EIA should result in outputs which assist in decision making and are acceptable to all involved stakeholders.

Relevant	EIA should provide sufficient, reliable and useable information for decision making.
Cost-effective	The EIA process should achieve its objectives within the limits of available resources.
Efficient	The EIA process should impose the minimum cost burdens (financial and time) on proponents and participants while meeting accepted requirements and objectives of EIA.
Focused	The EIA should be concentrated on significant impacts and key issues that need to be taken into account by decision makers.
Adaptive	EIA should be adapted to the realities, issues and circumstances of the proposals under review without compromising the integrity of the process.
Participative	The process should provide appropriate opportunities to inform and involve interested and affected stakeholders, and their inputs and concerns should be incorporated in the EIA documentation and decision making stage.
Interdisciplinary	Appropriate techniques and expertise in the relevant disciplines, including use of traditional knowledge where relevant, should be employed.
Credible	The process should be carried out with professionalism, fairness, objectivity, and balance.
Integrated	EIA should address the interrelationships of all social, economic and biophysical aspects.
Transparent	The process should have clear, comprehensible requirements for EIA content, ensure public access to information, identify the factors what will be considered during decision making, and acknowledge limitations.
Systematic	The process should result in full consideration of all relevant information on the affected environment, proposed alternatives and the necessary mitigation and monitoring measures.

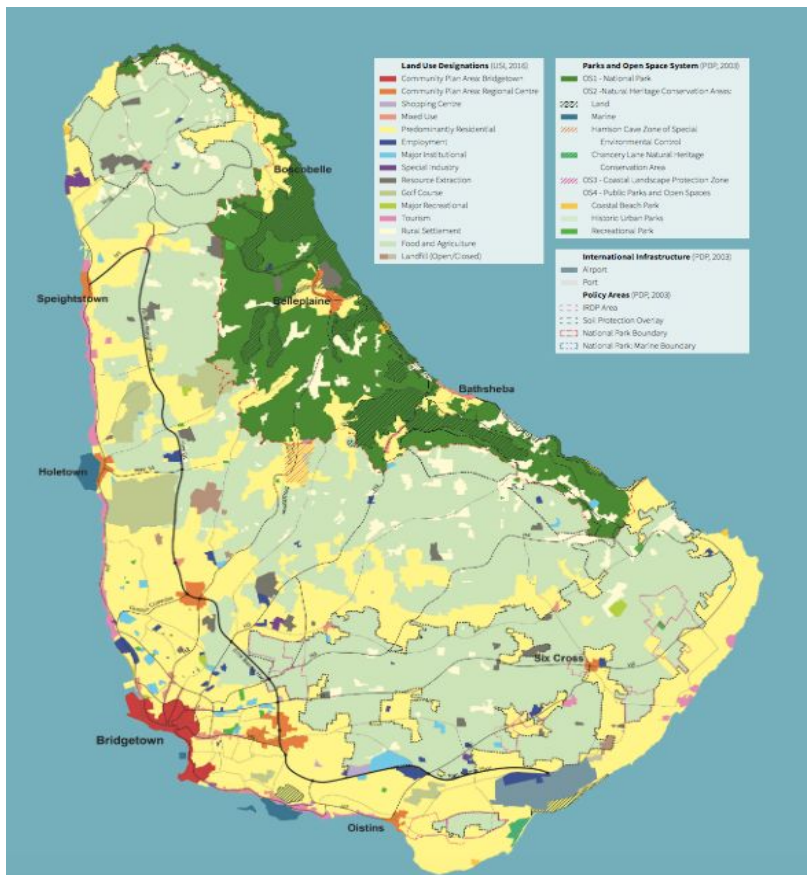
⁵⁷ IAIA. (1999). *Principles of Environmental Impact Assessment Best Practice*. Retrieved from https://www.iaia.org/uploads/pdf/principlesEA_1.pdf

Appendix 6: Hyatt Centric Hotel Floor Layout⁵⁸



⁵⁸ <http://www.drs360lab.com/portfolio/hyatt-centric-barbados/>

Appendix 7: Barbados Land Use Designation⁵⁹



⁵⁹ <https://www.urbanstrategies.com/project/barbados-physical-development-plan-barbados-national-park/>

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Paper # 2: Sustainability and Resort Development in Barbados

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Executive Summary

Contrary to popular belief, sustainability does not only focus on environmental accountability. In reality sustainability incorporates the social and economic impact of human beings living in one area for a long period of time. Coastal areas are extremely desirable locations for tourism. Small island states, such as Barbados, rely on their tourism industry as their driver for capital. When a country, province/state, or city depends on the revenue from tourism, it is in their best interest to ensure development is built sustainably. Developers hold a great responsibility to become sustainable leaders and work with the local, national and international government to satisfy global concerns while retaining their bottom line. In this paper I will examine the definition of sustainability and how it applies to the tourism and resort development in Barbados. I will also review policies and best practices of sustainable tourism and some alternative tourism approaches from a national, regional and international scope.

1 Sustainable Approaches

1.1 Defining Sustainability

The 1987 United Nations Brundtland Commission definition of sustainability is most commonly used as the baseline concept of the term. Here, sustainability was defined as “meeting the needs of the present without compromising the ability of future

generations to meet their own needs.”⁶⁰ Sustainability is often misunderstood as a concept which is solely environmentally focused; however, true sustainable practice encompasses social and economic pillars considered collectively in terms of the long term impacts like poverty or greenhouse gas (GHG) emission reduction.

Environmentally sustainable approaches ensure that ecological integrity is maintained, while at the same time ensuring all of earth’s environmental systems are kept in balance while natural resources within them are consumed by humans at a rate where they are able to replenish themselves.⁶¹ Social sustainability addresses universal human rights and basic necessities that are attainable by all people, who have access to enough resources in order to keep their families and communities healthy and secure. Healthy communities have just leaders who ensure personal, labour, and cultural rights are respected and all people are protected from discrimination.⁶²

Economic sustainability focuses on communities across the globe, allowing them to maintain their independence and have access to the resources that they require, financial and other, to meet their needs. It ensures that economic systems are intact and resources are available to everyone.⁶³

However, sustainability has a unique relationship to business in a resource-constrained world. There are three perspectives when examining sustainability as it pertains to the

⁶⁰ Sustainability | Academic Impact. (n.d.). Retrieved July 3, 2019, from <https://academicimpact.un.org/content/sustainability>

⁶¹ University of Alberta Office of Sustainability. (n.d.). *What is Sustainability*. Retrieved from <https://www.mcgill.ca/sustainability/files/sustainability/what-is-sustainability.pdf>

⁶² Ibid

⁶³University of Alberta Office of Sustainability. (n.d.). *What is Sustainability*. Retrieved from <https://www.mcgill.ca/sustainability/files/sustainability/what-is-sustainability.pdf>

corporate world; 1) business is capitalism and is the enemy, 2) sustainability as a driver of efficiency in business; and 3) innovation or business is seen as the saviour.⁶⁴ It can be argued that business as the enemy perspective gained traction during the industrial revolution which began in the early 18th century.⁶⁵ As the Western World's demand for efficiency to support its growing population aligned with new inventions, businesses adopted new manufacturing practices at larger scales. The economic model shifted from one of slow production to increased production and exponential profit. Pollution and poor waste management were at an all time high when the first modern environmental laws were created under the Britain's Alkali Act of 1863, as a response to the United Kingdom's rising air pollution.⁶⁶ The second point, sustainability as a driver of efficiency in business, speaks to the current context of our society in that it is a responsive perspective. As more data is collected, we have a better understanding of the severity of climate change and its global impacts, as a result there is now an emphasis on sustainability not only as a tool but a motivator for change. An example of this motivator happening was when Walmart announced its dedication to replace nearly two-thirds of its fleet with more fuel-efficient trucks, including hybrids. The company is also collaborating with truck and component manufacturers to build energy-efficient prototype tractors.⁶⁷ This commitment will provide long term cost

⁶⁴ Blowfield, M. (2013). *Business and Sustainability*. United Kingdom: OUP Oxford.

⁶⁵ <https://www.history.com/topics/industrial-revolution>

⁶⁶ MacLeod, Roy M. "The Alkali Acts Administration, 1863-84: The Emergence of the Civil Scientist." *Victorian Studies* 9, no. 2 (1965): 85-112.

⁶⁷ Confino, J. (2014, April 30). Best practices in sustainability: Ford, Starbucks and more. *The Guardian*. Retrieved from

<https://www.theguardian.com/sustainable-business/blog/best-practices-sustainability-us-corporations-eres>

savings, reduce GHG emissions and may improve Walmart's reputation which in turn could attract new customers who are more environmentally conscious. Finally, innovation or business being seen as the saviour, is a perspective that could correlate to the society's utopian goal of marrying business and sustainability.

A business that strategically integrates all three perspectives into its mission - all the way down to the product's life cycle - is the solution to the complexities of climate change and business. There are a growing number of certified B Corporations (B Corps) that hold an integral commitment to sustainable 'triple-bottom line' (social, economic, and environmental) goals to its business model. Certified B Corps are "social enterprises verified by B Lab, a nonprofit organization [which] certifies companies based on how they create value for non-shareholding stakeholders, such as their employees, the local community, and the environment."⁶⁸ The resort development field is a complex industry that, depending on the shareholders and stakeholders involved, has the full potential to apply integrative sustainable approaches to satisfy a socially progressive, environmentally conscious and profitable business.

1.2 Hyatt and Corporate Social Responsibility

⁶⁸ Kim, S., Karlesky, M. J., & Schifeling, T. (2016, June 17). Why Companies Are Becoming B Corporations. *Harvard Business Review*. Retrieved from <https://hbr.org/2016/06/why-companies-are-becoming-b-corporations>

For the fluidity of the portfolios, I will incorporate the Hyatt Hotel to discuss how a hotel interprets sustainability through corporate social responsibility (CSR) in its business. Defining CSR has its own academic debate, however for the purpose of this paper CSR is defined as: “the act of companies improving the social and environmental consequences of their activities”.⁶⁹ CSR and triple-bottom line have conceptual synergies which distills down to the root of what is known as sustainability.

In 1957, The Hyatt was founded by Jay Pritzker after he purchased the Hyatt House motel adjacent to the Los Angeles International Airport.⁷⁰ 62 years later, his purchase has evolved into Hyatt Corporations, an international empire of hotel chains. Known for their luxury and upper-scale accommodations the Hyatt has undertaken annual ‘Corporate Responsibility’ reporting since 2011 and Environmental Metrics reporting since 2013. Based on the United Nation (UN) Sustainability Goal (SDGs), which will be elaborated on further in the paper, Hyatt Corporations committed to a 2020 target of reducing energy use and GHG emissions per square meter and water per guest night in each region by 25% compared to 2006.⁷¹ (Appendix 1) In water-stressed areas, they aim to reduce water use per guest night by 30%.⁷² Their goal is a part of an incentive

⁶⁹ Porter, M. E., & Kramer, M. R. (2006, December). Strategy & Society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*. Retrieved from <https://www.comfama.com/contenidos/servicios/Gerenciasocial/html/Cursos/Columbia/Lecturas/Strategy-Society.pdf>

⁷⁰ Hyatt History. (n.d.). Retrieved July 3, 2019, from <https://about.hyatt.com/en/hyatthistory.html>

⁷¹ Hyatt. (2017). *Hyatt Corporate Responsibility Scorecard - 2016/2017*. Retrieved from <https://about.hyatt.com/content/dam/HyattStories/thrive/CR-Scorecard-2016.pdf>

⁷² Ibid

program for management who will receive bonuses if targets are met.⁷³ The 2018 Environmental Metric CDP Response Report provided a mitigation measure for their growing concern of chronic rising temperatures that has implications on their operational cost for cooling and water supply for their hydroelectric plants.⁷⁴ In 2017, there was a 1% increase in energy demand, meaning a \$3.4M cost was affiliated with this issue. The report listed management methods for risk that would cost approximately \$1M with a return on investment in three years as follows:

“ (1) Because we anticipate utility costs to rise, efficiency has been an important focus at Hyatt. Our efforts include ongoing measurements of environmental metrics towards targets, implementing operational and capital improvement projects, colleague engagement, and implementing Sustainable Design and Construction Guidelines.

(2) As an example of an efficiency effort, Hyatt Regency Maui Resort and Spa has implemented a range of initiatives over the years. The property has received LEED® EBOM Silver certification, and was able to demonstrate that it was 30% more energy efficient compared to similar resorts in the process. The hotel has also completed the installation of a nearly 600 kW solar photovoltaic system.

⁷³ CDP Disclosure Insight Action. (2018). *Hyatt Hotels - Climate Change 2018*. Retrieved from <https://about.hyatt.com/content/dam/HyattStories/thrive/Hyatt-CDP-Response-Climate-Change-2018.pdf>

⁷⁴ Ibid

(3) Hyatt hotels have preventative maintenance programs in place, which enable properties to ensure equipment is operating optimally, and that the building is equipped to handle a range of environmental conditions”.⁷⁵

These management methods, such as a focus on efficiency measures, cannot influence the likelihood of temperatures changing and the associated risks, but they could reduce the potential magnitude of this risk’s impact on our business at the present time and going forward”.⁷⁶

This example of CSR is more environmentally focused but in general the Hyatt is making adjustments in practice to reduce its GHG emissions footprint while benefiting from cost savings. The Hyatt also has social initiatives that deliver empowering opportunities to its neighbouring communities. Since 2018, the *Hyatt Community Grants Program* has supported Hyatt hotels to identify the most pressing issues in their communities and support the nonprofit organizations providing meaningful local solutions.⁷⁷ Through this unique program, colleagues have the opportunity to nominate local nonprofits to receive grants that support local social and environmental priorities. However, depending on the perspective of the stakeholder, CSR can be used as a mere philanthropic gestures to respond to negative PR. Unfortunately, in the vulnerable

⁷⁵ Hyatt. (2017). *Hyatt Corporate Responsibility Scorecard - 2016/2017*. Retrieved from <https://about.hyatt.com/content/dam/HyattStories/thrive/CR-Scorecard-2016.pdf>

⁷⁶ CDP Disclosure Insight Action. (2018). *Hyatt Hotels - Climate Change 2018*. Retrieved from <https://about.hyatt.com/content/dam/HyattStories/thrive/Hyatt-CDP-Response-Climate-Change-2018.pdf>

⁷⁷ <https://about.hyatt.com/en/hyatt-thrive/our-communities.html>

and scientific realities of global warming, intent may not matter if the outcomes are not sustainable.

1.3 Sustainable Tourism: Case Study- Urban Strategies Conservation Project

The resort development model has been so popular and significant to the Barbadian economy since the 1950's, approaching tourism from a more sustainable angle can appear daunting to tourism traditionalists. Sustainable tourism has become a larger conversation at an international scale where global bodies like the UN are shifting their attention to vulnerabilities of Small Island Developing States (SIDS) due to traditional tourism. A supportive quote from the World Tourism Organization states:

“A sustainable approach to tourism means that neither the natural environment nor the socio-cultural fabric of the host communities will be impaired by the arrival of tourists. On the contrary, the natural environment and the local communities should benefit from tourism, both economically and culturally. Sustainability implies that tourism resources and attractions should be utilised in such a way that their subsequent use by future generations is not compromised.”⁷⁸

⁷⁸ World Tourism Organisation (2000) *Report of Multistakeholder Working Group on Tourism*.

New trends, like ecotourism, have evolved from sustainable optics on tourism and are becoming popular alternatives. Ecotourism is defined as “purposeful travel to natural areas to understand the culture and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make the conservation of natural resources beneficial to local people”.⁷⁹

Tourists have become more attracted to the idea of exploring preserved and conserved territories for not only to the environment's benefit but because it creates a genuine and authentic experience of the land and culture. By Barbados launching a conservation project in 2017, it displayed where they place importance on the type of experiences their tourists should have on the island.

Urban Strategies, a Toronto based company, has been working with the Government of Barbados since 2007 to work on the local policies documents. In 2016 they were retained to complete two tasks 1) to amend the next legislated update to the Physical Development Plan (PDP) and 2) to develop the plans for a protected National Park in the north east coast of the island. Their efforts won the Award for Planning Excellence: International Development by The Canadian Institute for Planners.⁸⁰

⁷⁹ UNESCO | Teaching and Learning for a Sustainable Future | Module 16: Sustainable tourism. (n.d.). Retrieved July 3, 2019, from http://www.unesco.org/education/tlsf/mods/theme_c/mod16.html?panel=3

⁸⁰ Awards for Planning Excellence Recipients | CIP. (n.d.). Retrieved July 3, 2019, from <http://www.cip-icu.ca/Honours-Awards/Awards-for-Planning-Excellence-Recipients>

Due to its positive long standing relationship with specifically the Ministry of Health and Environment and Town and Country Development Planning Office (TCDPO), Urban Strategies led a large team of British, American, Canadian and Caribbean consultants to undertake this work and identified many issues that had emerged since the previous update:

- climate change challenges and the commitments related to Barbados' status as a Small Island Developing State (SIDS);
- the Paris Agreement;
- the UNESCO World Heritage Site designation of Historic Bridgetown and its Garrison;
- the Government of Barbados' focus on the green economy, continued sprawl and development on agricultural lands; and
- concerns regarding food security⁸¹

Developing a national park and legally conserving a part of the island in 2016 is a telling sign of the new leadership on the island. There is recognition that perhaps the solution in addressing some of the emerging concerns can be found by increasing land designation to national parks instead of providing just waterfront resort features along the entire coast of the island.

⁸¹ Barbados Physical Development Plan & Barbados National Park - Urban Strategies. (2019, July 16). Retrieved July 3, 2019, from <https://www.urbanstrategies.com/project/barbados-physical-development-plan-barbados-national-park/>

2 National Initiatives

2.1 Tourism Master Plan 2014-2023: Report 2 Environment

The Ministry of Tourism and International Transportation constructed a policy document where Report 2 reinforces the intertwined relationship between tourism and the environment. There is a section on the Built Environment where there is a recommendation that the planning authorities be more stringent in the acquisition of detailed landscape plans from developers prior to construction, and the imposition of penalties if there is no adherence to the legislative requirements.⁸² However the language within this specific policy is weak and should stipulate the policy is not merely a recommendation but planning authorities must or shall be more stringent in the acquisition of detailed landscape plans. There is also an opportunity to add language regarding public engagement. There is a section on Tourism Capacity that highlights that it may not be the number of visitors on the island that bring environmental concerns but it is the visitor activity and management techniques that can cause the most adverse effects.⁸³ Beginning in 2006, there has been a decline in tourism to Barbados which was intensified by the 2008 economic crash; however in recent years, the number of visitors has been growing again. With the appropriate

⁸² Environmental Planning Group Inc. HLA Consultants . (2014). *Final Report Barbados Tourism Master Plan 2014–2023 Report II: The Environment*. Retrieved from <http://www.bhta.org/images/TMP/TMP-Report-II.pdf>

⁸³ Ibid

approach to management tactics adopted and implemented, Barbados should be able to absorb the predicted incline in visitors over the next 10 years with minimal environmental impact.⁸⁴

The report outlines adequate management tactics for sustainability when addressing tourism capacity:

- Managing the supply (of tourism or visitor opportunities, e.g. by increasing space or time available to accommodate more use)
- Managing the demand (e.g. through restrictions of stay length, total numbers, use type)
- Managing the resource (e.g. through hardening sites or developing facilities)
- Managing the impact (reducing the impact of use, e.g. modifying the type of use, or dispersing or concentrating use)⁸⁵

These tactics have a strong holistic analysis and the capability in its simplicity to be tangible, implementable tactics that the government can adopt. Considerations like cost or time sensitivity are not large interfering factors that would deter interest in practicing these tactics.

2.2 The Barbados Sustainable Development Policy

⁸⁴ Ibid

⁸⁵ Environmental Planning Group Inc. HLA Consultants . (2014). *Final Report Barbados Tourism Master Plan 2014–2023 Report II: The Environment*. Retrieved from <http://www.bhta.org/images/TMP/TMP-Report-II.pdf>

The urgency to respond to climate issues in relation to tourism was even brought forward in The Barbados Sustainable Development Policy 2004 document by The Ministry of Housing, Lands and Environment. The document seeks to produce guidelines which will be used by decision makers as they determine the direction which national development will take priority, bearing in mind the constraints imposed by the policies themselves.⁸⁶ Section 26: Sustainable Tourism Development emphasizes “major and urgent transformations away from the ‘business as usual’ mode of operation are critical if this country is to experience positive social and economic progress into the future through tourism.”⁸⁷ The Barbadian government appears to be accurate in identifying the shortcomings of their past tourism practices and have provided more realistic and cohesive policies that align with other policy documents. There are two policies that are applicable to the proposed Hyatt Centric Hotel in Bridgetown. Section 26.4 stresses all those involved in the tourism sector be required to implement environmental management programmes for their individual operation; and Section 26.6 states that appropriate support be offered to stakeholders attempting to pursue tourism-related initiatives which are socially, economically, and environmentally sustainable.⁸⁸ Section 26.4 is a requirement making this policy a stronger tool to get developers to implement environmental best practices whether that be in their design, selecting native species for their landscape, retrofit abandoned buildings for reuse all the way to their light bulb wattage options for their light fixtures.

⁸⁶ National Commission on Sustainable Development. (2004). *The Barbados Sustainable Development Policy*. Retrieved from https://www.blp.org.bb/wp-content/uploads/2017/07/bb_Sustainable_Development_Policy_2004.pdf

⁸⁷ Ibid

⁸⁸ Ibid

Section 26.6 highlights that support for the stakeholder pursuing tourism is valuable in relation to the 'triple-bottom line'. However, it is not indicated in this policy document what support would look like to the stakeholder. There are incentives opportunities that should be added into this context for more concise understanding on how one would be supported which could drive competitive interest from multiple future investors.

3 Regional Initiatives

3.1 Caribbean Community

The Caribbean Community (CARICOM) is a regional body consisting of 20 countries and rests on four main pillars: economic integration; foreign policy coordination; human and social development; and security.⁸⁹ Their mission is comprised of 12 components, but the following factors apply to tourism and sustainability:

- mainstream all aspects of sustainable development, including the environment, economic and social dimensions; and
- promote optimum sustainable use of the Region's natural resources on land and in the marine environment, and protect and preserve the health and integrity of the environment.⁹⁰

⁸⁹ Who we are — Caribbean Community (CARICOM). (n.d.). Retrieved July 3, 2019, from <https://caricom.org/about-caricom/who-we-are/>

⁹⁰ https://caricom.org/documents/11265-executive_plan_vol_1_-_final.pdf

CARICOM has displayed its commitment to these specific elements within their mission through the Strategic Plan For The Caribbean Community 2015 – 2019: Repositioning CARICOM document. Under Section 2.2.3.3 (Strategies)(3):

“Enhance Management of the Environment and Natural Resources – suggests legal and regulatory reform to improve land use planning and management; pollution prevention and control; waste management; building national and institutional capacities to conduct and use environmental and social impact assessments (including climate change screening/prooing); promoting energy efficiency and renewable energy options; promoting sustainable use and management of biodiversity; promoting integrated Coastal Zone Management; promoting conservation, management and sustainable use of the marine living and forest resources; and enhancing regional capacity to address ocean governance issues associated with, inter alia, proliferation of alien and exotic species, marine litter and biodiversity beyond national jurisdiction.”

A part of this reform is represented in Barbadian planning, one of the active members of CARICOM, wherein the latest version of the 2017 Physical Development Plan (PDP) uses more sustainable and progressive language for its planning policies. An example of this sustainable language is found up front in the Overview of the plan; that the PDP provides a vision for the sustainable growth and development of the nation by setting out policies to guide relationships among land uses, built form, mobility, community facilities, and physical infrastructure. There is a consistent theme across the national

and regional expectations to take on climate change impacts through strengthening and implementing their policies.

3.2 Caribbean Tourism Organization

The Caribbean Tourism Organization (CTO), is the region's tourism development agency, with 24 country members with a variety of allied private sector allies and its purpose is to lead sustainable tourism.⁹¹ In their 2008 CTO's Caribbean Sustainable Tourism Policy Framework they urge national governments and their national and regional partners to consider the following policies, which are only some policy guidelines in order to ensure more sustainable patterns of resource use as well as adopted in planned tourism operations:

- National building codes should preferably take into account the environmental impacts of developments in the construction, usage and demolition phases. During the planning phase, architects can integrate environmental considerations into the design of a building, for example by maximising conditions for natural lighting and circulation of air for cooling purposes.
- Public sector agencies related to tourism should lead by example and invest in resource efficiency measures themselves and communicate their success over time to stakeholders.

⁹¹ <https://www.onecaribbean.org>

- Larger tourism enterprises should be encouraged to reuse wastewater, for example by recovering wastewater from rinse cycles/dry cleaning cooling cycle, and using it for garden watering or flushing toilets. Wastewater must be properly treated in order to prevent pollution leaching into groundwater and/or marine areas, with implications for drinking water and also for the fragile reef ecosystems that are negatively impacted by the creation of nutrient rich environments.⁹²

The last policy mentioned resonates with the 2018 Barbados sewage crises. The magnitude of this incident grew from past blockages, which were caused by inappropriate debris getting into sewer lines, then causing damage to sewage pumps and filtering equipment.⁹³ Barbadians who do not properly dispose of waste can benefit from additional education on proper disposal, recycling, and general waste management practices. The sewage flooding impacted the south coast of the island, one of the most densely populated tourist areas on the island. Since action was not taken swiftly, Canada, the United States, and the United Kingdom all published travel advisories warning their citizens about the risks of travelling to Barbados.⁹⁴ This is a prime example of how a high tourist density region places strain on local infrastructure. Hotel corporations that are designated in these areas have the responsibility to encourage tourists and neighbouring community about sustainable practices like proper waste disposal to avoid impacts that can even lead to serious health risks.

⁹² <https://www.onecaribbean.org/content/files/CbbnSustainableTourismPolicyFramework.pdf>

⁹³ <https://globalvoices.org/2018/01/22/barbados-sewage-crisis-causes-a-flood-of-problems/>

⁹⁴ <https://globalvoices.org/2018/01/22/barbados-sewage-crisis-causes-a-flood-of-problems/>

4 International Initiatives

4.1 Barbados Programme of Action (BPOA)

From April 25th to May 6th, 1994, Barbados hosted the UN Global Conference on Sustainable Development of SIDS. The objective and outcome reaffirmed the global dedication to sustainable development Barbados also had the opportunity to form a Declaration stating its political will and commitment to the BPOA.⁹⁵ Within the formal BPOA document Section VIII- Tourism Resources outlines a national, regional, and international perspective for appropriate actions, policies and measures.

At a national level two policies support an authentic sustainable goal. Section VIII.40(a)(ii):

“Adopt integrated planning and policies to ensure sustainable tourism development, with particular attention to land-use planning and coastal zone management, requiring environmental impact assessments for all tourism projects; the continuous monitoring of the environmental impact of all tourism activities; and the development of guidelines and standards for design and construction taking into account energy and water consumption, the generation and disposal of wastes and land degradation, the proper

⁹⁵ BPOA (1994) - Barbados Programme of Action ... Sustainable Development Knowledge Platform. (n.d.). Retrieved July 3, 2019, from <https://sustainabledevelopment.un.org/conferences/bpoa1994>

management and protection of eco-tourism attractions, and the carrying capacity of areas for tourism.”⁹⁶

Even though the BPOA is 25 years old, this specific policy resonates with the subject matter of the two key portfolio papers. The international committee recognizes the significant influence and city planning contributed to in regards to the final outcomes to the tourism industry which is the economic driver for most SIDS. This policy also touches on the importance of EIA for **all** tourism projects. However, this idea still does not currently align with the planning policies in the PDP or Town and Country Planning Act. Lastly this policy underscores the protection of ecotourism as a priority, which reflects well on the progressive ventures in how Barbados should eventually move towards in their tourism portfolio.

Section VIII.40(a)(iii) states: “Identify and develop facilities to meet specific niche markets, particularly in eco-tourism, nature and cultural tourism, and involve local populations in the identification and management of natural protected areas set aside for eco-tourism”.⁹⁷ This important policy elaborates on alternative tourism options that distinctly lead to sustainable outcomes. It also incorporates the significance of public

⁹⁶ United Nations. (n.d.). *United Nations Conference on Environment & Development: Programme of Action for the Sustainable Development of Small Island Developing States*. Retrieved from <http://unohrrls.org/UserFiles/File/SIDS%20documents/Barbados.pdf>

⁹⁷ United Nations. (n.d.). *United Nations Conference on Environment & Development: Programme of Action for the Sustainable Development of Small Island Developing States*. Retrieved from <http://unohrrls.org/UserFiles/File/SIDS%20documents/Barbados.pdf>

participation which would have the end effect culture preservation and empowering the local community.

At a regional perspective Section VIII.40(b)(i) provides an action to: “ensure that tourism and the environment are mutually supportive in cooperation schemes at the regional level including, where appropriate, through harmonizing standards and regulations”⁹⁸

This policy has an opportunity to be executed amongst CARICOM. This focused region of SIDS (minus Guyana) can monopolize on sharing sustainable best practices more frequently and transparently within the resort development industry amongst each other since many are faced with similar challenges.

Lastly, Section VIII.40(i) states that to “promote the recognition by the international community of both the value of tourism in small island developing States and the fragility of the resources on which it depends, and of the resulting need for international support to encourage its sustainable development”. This policy supports the constant yet necessary messaging we see from the UN SDGs initiatives that holds public and private sector accountable to 17 UN established strategies (Appendix 2).⁹⁹ This consistency in promotion has resonated and we do see its mark on resort development, the Hyatt being a key example.

4.2 UN Sustainable Development Goals

⁹⁸ Ibid

⁹⁹ SDGs ... Sustainable Development Knowledge Platform. (n.d.). Retrieved July 3, 2019, from <https://sustainabledevelopment.un.org/sdgs>

Another important sustainable framework to examine against tourism development is the SDGs to tourism development practices. In 2015, the UN established 17 goals to guide development until 2030 in response to the pressing global concerns of climate change and provides a shared blueprint for peace and prosperity for people and the planet, now and into the future.¹⁰⁰ The UN also established The UN World Tourism Organization (UNWTO), an agency dedicated to the promotion of responsible, sustainable and universally accessible tourism. In their 2017 Annual Report they focused their commitment to target three out of the 17 SDGs:

- #8 Decent Work and Economic Growth: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products;
- #12 Responsible Consumption and Production: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products and;
- #14 Life Below Water: By 2030, increase the economic benefits to SIDS and least developed countries from the sustainable use of marine resources,

¹⁰⁰ SDGs ... Sustainable Development Knowledge Platform. (n.d.). Retrieved July 3, 2019, from <https://sustainabledevelopment.un.org/sdgs>

including through sustainable management of fisheries, aquaculture and tourism.¹⁰¹

The annual report touches on notes from a Euro-Asian Mountain Resorts Conference and highlights the importance of an integrated land use, infrastructure and transport planning approach to illustrate good practices in operational structures and models to develop mountain destinations and resorts. However, when a UN meeting assembly was for the Caribbean context the discussion focused around the urgent and serious matter of natural disasters in the region and how to best respond and develop the most efficient risk management practices. Even though the natural disasters are a priority, it is important to callout the missed opportunity to also include the pressing concerns of resort development like the consistency in the implementation of EIAs and the social implications for dominating land use for tourists.

5 Conclusion

The relationship between sustainability and resort development has moments in exceptional policy writing that can work cohesively with consideration of how necessary one almost would exist without the other in the context of successful tourism in SIDS. However, at times, there is a disconnect from policy to implementation to impact on corporation's operations. We see

¹⁰¹ UN World Tourism Organization. (2017). *UNWTO Annual Report 2017*. Retrieved from <https://www.e-unwto.org/doi/pdf/10.18111/9789284419807>

great efforts from more giant corporations that can turn away from innovations, strategies, or practices if there is not a more immediate return on investment. Hotels overheads are so high that it can be attractive to take operational or design approaches that are faster and cheaper to execute to get clients/guests to their grounds as quickly as possible. However, there are telling signs that the model is shifting for many Chief Operating Officers for financial reasons, but to others, they may believe the mission from The Barbados Sustainable Development Policy that it is better to drive business by; “Doing the right things by doing things right.”¹⁰²

APPENDICES

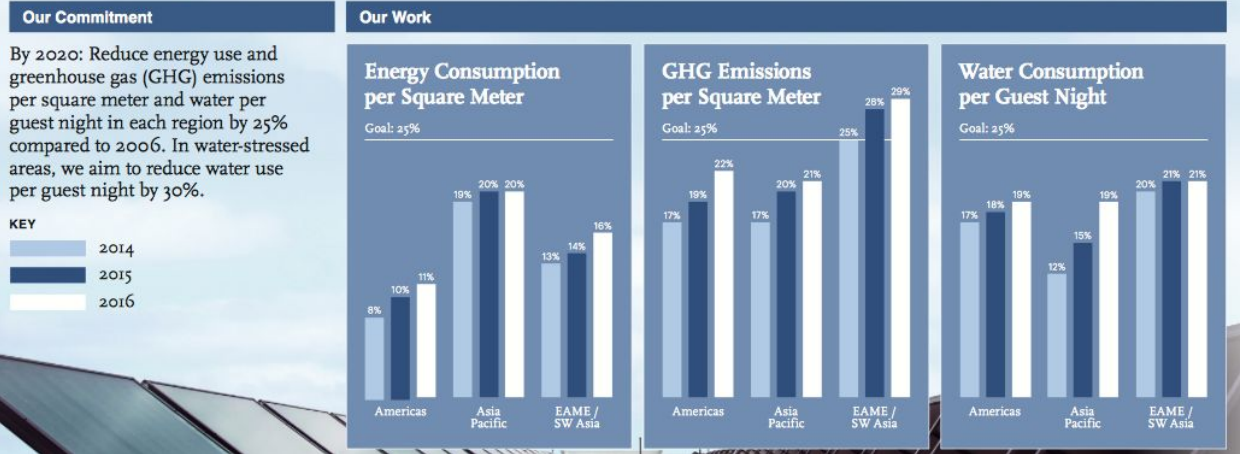
Appendix 1: Hyatt 2016/2017 Corporate Responsibility Report: GHG Emission Reduction Targets¹⁰³

¹⁰² National Commission on Sustainable Development. (2004). *The Barbados Sustainable Development Policy*. Retrieved from https://www.blp.org.bb/wp-content/uploads/2017/07/bb_Sustainable_Development_Policy_2004.pdf

¹⁰³ Ibid

How We're Doing on Our 2020 Environmental Sustainability Vision

Reduce Energy, GHG Emissions, and Water



Appendix 2: United Nations 17 Sustainable Development Goals¹⁰⁴

Sustainable Development Goals



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Paper #3: Canadian Urban Institute

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1 What did I do?

Between May 2017- September 2018 I worked with Canadian Urban Institute (CUI).

CUI is a non-profit applied research organization dedicated to achieving healthy urban development. I was responsible for many tasks including their day to day operations and contributed researched content to some of their projects. As a Research Intern, I carried out the following duties;

- Conducted benchmark or best practice research,
- Analyzed demographic, geographic and economic data,
- Prepared concise and well-structured written summary reports and other communication materials,
- Supported the engagement components of CUI's projects such as; creating promotion material,
- Conducted outreach by phone and email, developed materials, attended public or stakeholder meetings,

1.1 Daily Operations

I received an old contact list that required updating. The menu consisted of a variety of key stakeholders that are involved with the development of the city. For example, individuals from architecture firms, planning consulting firms, Government of Ontario staff, planners from the City of Toronto, and various developers. I also used my discretion to include additional relevant parties to the list (i.e., NGO's, civil society groups, etc.).

1.2 +Placemaker: Resilient Toronto- Part 2 Event

On May 16th, 2018, CUI hosted a pay-what-you-can event at the Toronto Reference Library. "The event was the second of a three-part series designed to engage city-builders and citizens in the development of a robust Resilience Strategy for the City of Toronto. The session will build on the outcomes of the first event and generate additional ideas and solutions that will be used to guide Toronto's Resilience Strategy toward creating a culture of resilience and action" (Eventbrite, 2018).

I managed registration by greeting and registering guests, completing name badges and providing event and seating information. I also dealt with signage and direction; helping with placing directional signage throughout the library, standing in predetermined areas to welcome and guide guests. Lastly, I assisted with organizing the Presenters; connecting with and helping the speakers with their presentation needs, ensuring speakers are available before their set times and escorting them to stage on time.

1.3 Waterfront Toronto

Waterfront Toronto (WT) hired CUI to amend and update their 2017 Resilience and Innovation Framework for Sustainability document. The document was formulated to articulate categories that must be considered when developing the waterfront region. “Waterfront Toronto’s primary goal is to create vibrant and sustainable places for people who live, work, play and draw inspiration from the waterfront. As a result, people are placed at the heart of the new Framework” (Waterfront Toronto Resilience and Innovation, 2017, p.3)

I researched recent examples of a variety of relevant sustainable development case studies to establish a list of best practices to incorporate into a long benchmark list. The list included the name of the project, the year it took place, its sustainable goal and a short description of why the plan was successfully renowned. This benchmark document will guide WT in how to conduct implementation of their various sustainable goals within the Toronto context.

2 How Did The Experience Helped Me Gain Mastery Of My Area Of Concentration And Its Components?

2.1 Waterfront Toronto: A Coastal Development Success

My area of concentration focuses on sustainability in tourism planning for coastal cities through establishing strong policies and environmental impact assessment standards. Interning at CUI as a researcher compliment my components in resilience and tourism planning. Researching case studies on international coastal city

development exposed me to many successful examples of sustainable development located along a body of water. I was able to enhance my knowledge of WT and its dedication to sustainable development for a healthy well-balanced city. WT have award-winning projects that I will apply to my own working knowledge for my Plan of Study. I believe the strength of the projects stem from their firm and unwavering partnership between all levels of government. The cohesion between stakeholders for environmental consideration while welcoming development is exemplary conduct in coastal city planning. In 2017 they received the following:

- Urban Land Institute Global Awards for Excellence for the West Don Lands
- Canadian Brownfield Awards: Redevelopment at the Community Scale for East Bayfront/Bayside Development
- Canadian Brownfield Awards: Best Overall Project - Port Lands Due Diligence
- Ontario Association of Architects (OAA) Lieutenant Governor's Award for Design Excellence in Architecture: River City Phase 1 & 2
- Toronto Urban Design Awards: Award of Excellence for the West Don Lands Public Realm
- Toronto Urban Design Awards: Award of Excellence for the Queens Quay Revitalization
- Consulting Engineers of Ontario (CEO) Willis Chipman Award to R.V. Anderson Associates Limited and DTAH for the East Bayfront Stormwater Management System. (Waterfront Toronto, 2018).

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1 What Did I Do?

1.1 Introduction

Between December 2017- April 2018 I worked with the Small Print Toronto team to animate a 6-week planning workshop for youth between the ages of 8-12 years old. I was responsible for many tasks from concept to execution. The object of '*Mouse City Valley*' project was; "Inspired by the way Evergreen BrickWorks balances the competing demands of urban growth and natural preservation in the Don Valley, our project revolves around children answering this question through building: **What is the story that the valley and the buildings tell together?**" (Small Print Toronto, 2018). I carried out the following positions; contributor to the grant application, program developer, coordinator and program animator.

In November 2017, my first task was completing a proposal, with three other colleagues, to the Toronto Arts Council (TAC). TAC was offering a \$27,000 grant to an NGO who was coordinating an educational base arts children's program. Once we received approval, we finalized workshop programming details and booked guest contributors to host the weekly sessions.

As a Program Developer, I used my environmental planning knowledge to design appropriate subject matters within the 6-week timeframe. The project comprised of six distinct units; Mapping, Model Ecosystem, Mouse-Size Footprints, Into the Garden, Book Launch, and Tours of Mouse City Valley.

1.2 Unit One - Mapping

Professor Jennifer Bonnell, of York University, and artist Rani Sanderson led students on a guided walk of the green spaces surrounding Evergreen Brick Works (EBW). Students received a grid of the area that lists landmarks and contained blank spaces. They added sketches of not only what they saw but what they would like to see during the walk. After the walk, Jennifer led a group discussion about how the Don Valley functions as an ecosystem. Students then constructed a 'blueprint' of the imaginary "Mouse City Valley," based on their notes and sketches from the walk. They focused on how buildings are added to Mouse City Valley without interfering with its ecosystem.

1.3 Unit Two - Model Ecosystem

Environmental architect, Annabel Vaughan and artist, Rani Sanderson guided students through the process of building a model valley out of recycled materials. Students created hills and learned about topography by stacking sheets of cardboard. Once the various contours were in place, students covered the cardboard in green paint to simulate the valley. To represent a working ecosystem, students crafted miniature trees and other essential foliage out of recycled materials and added them to the model.

1.4 Unit Three - Mouse-size Footprints

Myself and the team continued to guide students through the process of constructing sustainable model buildings that respond to the shape and environment of the model valley, using recycled craft materials. As Mayor of Mouse City, journalist Jane Farrow interviewed the students about where they wanted to place the buildings in the valley, to understand 'land use planning/ land designation.' Students also took part in a traditional story circle conducted by award-winning children's author Melanie Florence, based on how their building contributes to the overall story of Mouse City Valley.

1.5 Unit Four – Into The Garden

Children put the final touches on their buildings and the valley. Students took part in another story circle conducted by Melanie Florence. The story circle was recorded and used as part of an audio guide for visitors. The audio tour was posted on our website for accessibility, so visitors can listen to it while looking at the diorama.

1.6 Unit Five – Jane Jacob Book Launch & Mouse City Valley Times

CBC Radio came to conduct interviews with the children. The student shared their experience of the project and what they learned about the Don Valley. The author, Susan Hughes launched the children's book "*Walking in the City with Jane*". The book illustrates urban planner, Jane Jacobs' life and how her passion for observing the streets led to significant impact to the city.

The students created their own story of how the mice lived and used the space in the valley. Their illustrations and short stories were collected and made into a booklet called '*The Mouse City Valley Times*' and distributed to visitors in the last two sessions.

1.7 Unit Six- Tours Of Mouse City Valley

The diorama exhibited in the Children's Garden at EBW where students offered guided tours of Mouse City Valley and encouraged visitors to listen to the audio guided as well.

As a Coordinator, I negotiated space with the event planners at EBW, purchased and collected art supplies and corresponded with guest hosts and contacts from the publishing company, Kids Can Press.

As a Program Animator, I assisted with student inquiries on the subject matter, prepared materials, kept sessions on schedule, and encouraged participating parents to get involved.

2 What Did I Learn?

2.1 Significance Of The Don Valley

I was able to enhance my knowledge of the Don Valley and its significance to Toronto, for the cultural, economic and environmental value it produced within this crucial area of the city. The Don Valley is a Canadian historical site birthed during the industrial revolution. It was a place where the raw materials of the Don Valley River were taken and converted into resources that people of the time could use on a daily basis. From a cultural perspective, Europeans were not the first to settle in the Don Valley. The Don Valley appears to have been occupied by a variety of First Nation peoples such as the Hurons, the Seneca (members of the Iroquois Confederacy) and the Mississauga (members of the Ojibway) (Bonnell, p.11, 2014).

From an economic perspective, fishing was the predominant and initial industry for the First Nations people. Nature were not only for human use for survival but was also a tool to navigate communities and dictated the way humans interacted and settled. Observing the ecology of the Don maximized their chances for survival. Sophisticated knowledge of the land was evident when early communities strategically decided where the safest places were to settle camps, huts, and homes (Toronto Plaques, 2004). The water became so polluted from brick development that the fishing industry was fully extinguished and the brick and paper development became the main source of revenue in the region. It was not until the mid-1800's that industrial development

created a new type of economy in a similar way seen today. Evergreen Brickworks opened in 2010 and over the last seven years had demonstrated you can accommodate the past with the present to reach sustainable goals while being profitable.

Environmentally, it is unlikely that the region is capable of converting entirely back to its natural state, due to significant adverse impacts such as water pollution from brick and paper development and the construction of the Don Valley Parkway in the 1950's. Since the founding of Toronto, residents' attitudes and uses towards the Don Valley have varied; in the case of re-routing the river around Todmorden Mills, the river was earlier used as a noxious dumping ground, a refuge for the homeless and other marginalized people, and as a general escape from the grime of the city to the beauty of nature (Bonnell, p.32, 2014). Today people have a better understanding of ecology and watershed management. EBW has successfully created a model of ecotourism by highlighting the importance of preservation by using green infrastructure, building partnerships with NGO's like Toronto Regional Conservation Authority while attracting residents to the natural areas with a new-found appreciation for native species and natural processes.

A significant factor impacting the ecology of Don Valley is the predominance of non-native plants, some of which are considered invasive because they aggressively crowd out native species.

Volunteers from the Todmorden Mills Wildlife Preserve Committee periodically remove non-native plants and replace them with natives. The goal is for native plants to eventually re-colonize the entire site, and as they begin to flourish, this attracts native wildlife, including insects, birds, amphibians, and smaller mammals like muskrats back into the site. However, invasive species continue to threaten this goal, as the arrival of exotic species like the emerald ash borer (a beetle that kills native ash trees) and fire ants disrupt the ecology of the Valley. (Toronto Plaques, 2004).

2.2 Classroom Management Skills

As the Program Animator, I was able to distill complex environmental planning concepts to a young and unfamiliar demographic. I exercised classroom management skills throughout the first three sessions. Myself and the team set-up the materials and room in a way that encouraged engagement for the students. I created ground rules and behavioural standards that all the kids agreed upon. These standards allowed organization and a smooth flow to the sessions.

2.3 Environmental Planning Knowledge

I also enhanced my environmental planning knowledge skills. Breaking down large concepts like green infrastructure, urban planning, preservation, sustainability, and renewable energy in an accessible manner for a young demographic pushed me to be a stronger planner communicator. For example, I asked the kids to define sustainability in their own words. After discussing their interpretations, we applied that knowledge to

the academic definition. Afterward, we asked them where they see sustainability in the Don Valley and identify what is sustainable in the area.

2.4 Communication Skills

I heavily utilized my communication skills for the duration of the project. I was able to answer many simple yet sometimes complex questions in a clear and articulate manner. I was working with a team of five whom we all shared responsibility and had to possess stronger communication for the program to run smoothly. We would have team meetings before and after each session debrief about what were some successes and challenges throughout the workshops session. This strategy steadily improved the performance and outcome of each session every week.

2.5 Presentation Skills

The workshop provided me with the opportunity to present our project in front of the Ministry of Housing and Municipal Affairs senior staff. I created a PowerPoint presentation of the project and shared takeaways from my experience. The purpose of the presentation was to educate the ministry on the types of planning projects that exist within the Toronto community and how they can encourage more program within the same vein in the future.

3 How did the experience helped me gain mastery of my Area of Concentration and its components?

3.1 Tourism planning- Evergreen Brick Works as an Ecotourism Model

My area of concentration focuses on resilience in tourism planning for coastal cities through establishing strong policies and environmental impact assessment standards. The Mouse City Valley project compliment my components in resilience, tourism planning, and EIA. Researching the history of how the Don Valley developed alongside with EBW exposed me to a successful example of EDW sustainable development located along a body of water.

EBW created a model ecotourism industry that services residents with the following:

- provide electric car charging station/parking
- local organic food markets
- food trucks
- café/restaurant
- environmental artisan gift shop
- space to animate events
- environmental programs
- educational programs
- urban agriculture
- children's garden
- a variety of outdoor activities
- shuttle buses to reduce carbon emissions

With conservation, preservation and flood risk management top of mind, EBW proudly holds the first LEED Platinum accreditation building, The Centre for Green Cities, on site (Evergreen Brickworks, 2018). This level of commitment to sustainability proves it is manageable to consider the environment on a heritage site in a floodplain while maximizing economic opportunity. I believe EBW, at a micro level, have achieved the balance I seek within my area of concentration.

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Paper #5: Desalination Plant Expansion in Barbados

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1 Overview

The first meeting I attended was an environmental impact assessment (EIA) public consultation for a proposed desalination plant expansion in Black Rock, Barbados and the second event is a Committee of Adjustment at the City of Toronto municipality. I will reflect on the following regarding my experiences at both meetings:

1. Public involvement; high or low?
2. How public involvement is organized
3. How public involvement is coordinated, either directly or indirectly
4. What is the planning project?
5. Who are the stakeholders?
6. Demographic of residents
7. How were comments and questions received and recorded?

2 Desalination EIA Public Consultation- Barbados

2.1 Public Involvement

The meeting was held at St. Stephens Church, Blackrock, St. Michael. This location was selected for accessibility purposes for the public that would be close to the impacted region. As well, religious type venues are highly common because the large population that attend mass are familiar with the church environment as their typical community hub. There were 25 residential attendees which is considered low based on the size of the venue and surrounding population that would be impacted by the plant expansion.

2.2 Organization

The public consultation started promptly at 7pm and ended at 9pm. There were two large screens in the front of pews which allowed easy visibility of visuals and text regarding the proposal.

The Agenda:

- Prayer
- Opening remarks and introduction of Head Table from Barbados Water Authority (BWA)- Alex Ifill
- Background and justification for expansion
- Description of the expansion project- by Ionics (Steve Kern)
- Potential environmental impacts and mitigation measures- by SBG (Junior Jackson)
- Q&A period
- Conclusion and final remarks

2.3 Coordination

The meeting was directly coordinated through eight reps from Ionics, and three consultants. The presentations were an hour which left an hour for Q&A. The meeting was indirectly coordinated through the radio and news media outlets which is the most common method of educating the public of ongoing public meetings. However, similarly to the Canadian context, mostly mature and senior residents attended.

2.4 The Project

Ionics' desalination facility at Spring Garden, Barbados is proposing an expansion to augment the island's water supply. This would incorporate a reserve (emergency) supply. The expansion is necessary to respond to current and historical operational impacts related to drought periods. There are two key elements to the project; 1.) well field and 2.) on site storage. An EIA was presented to inform the public of its potential impacts and how it will be mitigated. Some concerns that were considered are the following:

- ❑ Construction impacts: dust and noise, storm water runoff
- ❑ Brackish Water Availability- 30,000m³ to 48,000m³ a day- however, there will be no impacts on the available water wells with the expansion
- ❑ Brine Disposal
- ❑ Chemical storage, usage and management- the same chemicals will be used for treatment at the plant and will continue to be used for best practices

2.5 Stakeholders

Present and direct stakeholders:

- ❑ Ionics Freshwater Ltd

- SB Global Barbados Ltd: Architecture and Design firm
- Barbados Water Authority
- Local Residents
- Media/News

There were zero representatives from any type of environmental civil society/NGO present at the meeting.

2.6 Demographic of Residents

Those who attended were a majority of senior citizens but was fairly split down the middle regarding male vs. female turnout. I personally found there was a lot of information condensed to meet the one-hour time frame allotted. The time crunch resulted in the presenter moving PowerPoint deck quite quickly and an older demographic may struggle to retain the information. Even though, the PowerPoint was moving quickly the slides delivered a step by step description of the desalination process.

2.7 Q&A Reporting

Approximately three residents stood in front of a mic to address the experts with their concerns. The Q&A period was an hour and recorded via minutes by an Ionics rep and on camera as footage for local news.

- Female resident- Adele Blackman, lives right by the proposed expansion area and is concerned of mud, collection of mosquitos, increased insurance in the area, and asked if dust screens are for construction and for residents?
- Reverse Osmosis was explained to the public in this time frame
- Male man- concerned with the waste from construction. He was told, the additional materials will be removed.

- ❑ Male man from Stantec- asked if the Aquifer is connected with the belle aquifer, He also addressed that the presentations did not speak to the drought timeline.
- ❑ EIA consultant stated storage will be built in an exterior building. There are weekly and monthly assessments for monitoring if there are any issues.