Green State
Development Strategy
VISION2040

Diversified, Resilient, Low-carbon, People-centred

VOLUME III

INCLUSIVENESS, POLICY COST ESTIMATES AND MONITORING & EVALUATION (M&E) FRAMEWORK

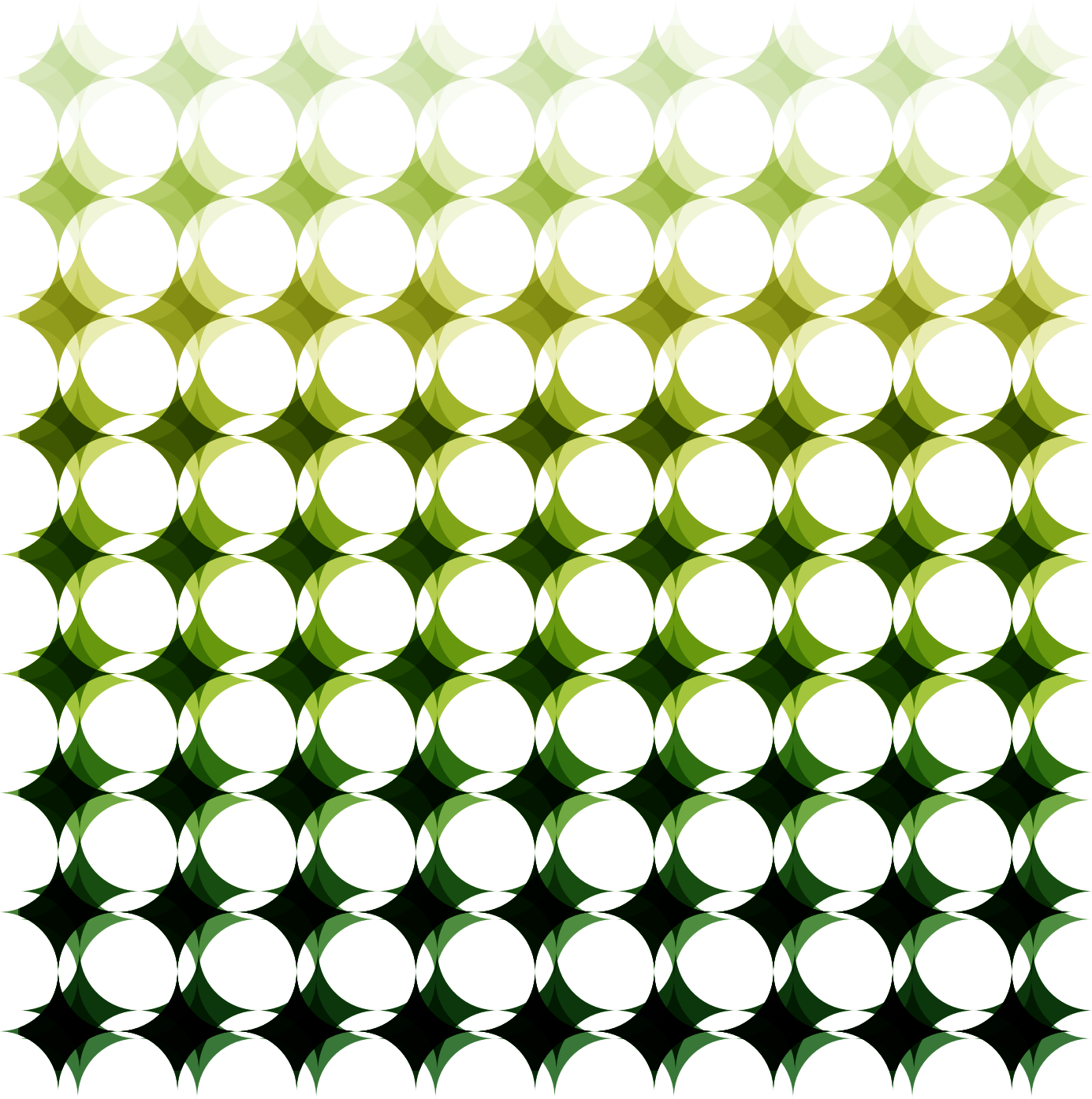

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION 2

CHAPTER 2: **Ensuring Inclusiveness in Policy Implementation** **5**

2.1 Approach and methodology 6

2.2 Summary of results and findings 8

2.3 Conclusions and recommendations 17

CHAPTER 3: **GSDS Cost Estimates** **19**

3.1 Objectives of the costing exercise 20

3.2 Approach to Estimating Budget Costs 20

3.3 Assessment of aggregate spending 22

3.4 Refining the cost estimates 23

3.5 Consultations with the Public Health Sector 26

3.6 Conclusions 26

3.7 Results of the Cost Estimates 28

3.8 Recommendations for integrating the GSDS Cost Estimates into the National Budget 34

CHAPTER 4: **Monitoring and Evaluation (M&E) Framework** **37**

4.1 Introduction 38

4.2 Methodology and approach 39

4.3 Conclusions and Recommendations 42

4.4 M&E Framework and Strategic (dashboard) indicators 44

ANNEX I: INDICATOR METADATA REPORTING FORM 58

ANNEX II: ANNOTATED BIBLIOGRAPHY OF MONITORING AND EVALUATION (M&E) BEST PRACTICES 60

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CHAPTER 1

INTRODUCTION

The Green State Development Strategy: Vision 2040 (GSDS) is Guyana's twenty-year, national development policy. The GSDS Project was implemented by the United Nations Environment Programme (UNEP) and funded by the Guyana REDD+ Investment Fund (GRIF) of the Government of Guyana. The project document and agreement were signed in July 2017 and work commenced in November 2017, following the establishment of the UNEP/GSDS Project Office in Georgetown, located at the Department of the Environment, Ministry of the Presidency.

The vision of the 'green state' is "An inclusive and prosperous Guyana that provides a good quality of life for all its citizens based on sound education and social protection, low-carbon and resilient development, providing new economic opportunities, justice and political empowerment." Its central objective is development that provides a better quality of life for all Guyanese derived from the country's natural wealth – its diversity of people and traditional customs, as well as abundant natural resources (land, water, forests, mineral and aggregates, biodiversity). The vision of the 'green state' is centred on principles of the green economy defined by sustainable, low-carbon and resilient development that uses its resources efficiently, sustained over generations. The development philosophy emphasizes the importance of a more cohesive society based on principles of equity and tolerance between ethnic groups – recognizing that diversity of culture and heritage is the underlying strength of the country's human capital. Development objectives therefore seek to improve the health, education and overall well-being of Guyanese citizens, to lift people out of poverty through an economy that generates decent jobs and that provides opportunities for sustaining livelihoods over the long term.

This is the third and final volume of the Strategy. Two prior stand-alone volumes – *Volume I: Policy Recommendations, Financial Mechanism and Implementation* and *Volume II: Analytical Evidence to support the Green State Development Strategy* (the Annexes) – were submitted to the Cabinet on 28 May 2019. Although not required in the original terms of reference, *Volume III: Inclusiveness, Cost Estimates and the Monitoring and Evaluation (M&E) Framework* was made possible through the budget savings of the GSDS Project and at the request of the GRIF Secretariat and the Ministry of Finance. The content of Volume III was developed from consultations with ministries and stakeholders conducted between October 2019 and February 2020. The findings of Volume III were presented between May and June 2020 in virtual validation meetings with the Ministry of Finance, senior staff of ten (10) other Ministries, the GRIF Secretariat and the M&E focal points of each Ministry, as well as to UNEP staff.

Consultations on the M&E Framework were also held with heads of agencies of the UN system in Guyana, as these agencies also monitor and report to the Government of Guyana on the agreed Country Implementation Programme

"An inclusive and prosperous Guyana that provides a good quality of life for all its citizens based on sound education and social protection, low-carbon resilient development, new economic opportunities, justice, and political empowerment."

(CIP) of the United Nations Multi-country Sustainable Development Framework (UN MSDF). The MSDF is the business plan for the UN agencies, funds and programmes in the English and Dutch speaking Caribbean, including Guyana, for the period January 2017 to December 2021. The Ministry of Finance also requested complementarity between the M&E requirements of the GSDS and the CIP. Volume III should therefore be considered the beginning of a continuously evolving body of work, particularly as the UN system will begin work on a new CIP in late 2020.

Focused group consultation sessions were also conducted with the most vulnerable groups and their representative associations at the request of the GRIF Secretariat. The objective was to discern how best to directly tailor relevant communications to these groups, some members of which live in remote locations and/or operate on the margins of Guyana's society, and to ensure that delivery of benefits are inclusive and satisfy the needs of the most vulnerable. The feedback from these sessions are also useful for designing and targeting future projects. Although the completion of Volume III is later than anticipated because of several delays related to the political events in Guyana and more recently the COVID-19 disruptions, the support of local stakeholders was central to its completion.

CHAPTER 2

ENSURING INCLUSIVENESS IN POLICY IMPLEMENTATION

CHAPTER 2

ENSURING INCLUSIVENESS IN POLICY IMPLEMENTATION

One of the core goals of the *Green State Development Strategy: Vision 2040* is to lift people out of poverty. Effective communication to all citizens is therefore critical for successful implementation of the national development strategy. This includes using all available media technologies when engaged in outreach and awareness-raising activities, and with messaging designed for the most vulnerable of citizens. In the case of Guyana, the most vulnerable groups include women, girls and boys/youth, indigenous people, lesbian, gay, bisexual, transgender & queer (LGBTQ), and other disadvantaged groups (elderly, unemployed etc.). Outreach to these groups is important for refining communications messages and developing more targeted, value-adding project activities.

2.1 Approach and methodology

To accomplish the above communications objectives, focused sessions were organized during January-February 2020 involving each of five vulnerable groups in separate sessions, listed in Table 1, along with their representative associations.

TABLE 1

Vulnerable groups and representative organizations

Vulnerable Group	Representative Organizations
LGBTQ **HIV/AIDS**	Society Against Sexual Orientation Discrimination (SASOD) Guyana Guyana Trans United (GTU) SASOD Women's Arm Guyana Global Community of Women and Girls Living with HIV – Guyana Guyana Sex Workers Coalition
Women	Women Across Differences (WAD) Georgetown Public Hospital Corporation (GPHC) Clinic Help and Shelter Women and Gender Equality Commission Ministry of Social Protection Guyana Public Service Union, Women's Advisory Committee
Elderly/Disability	Deaf Association of Guyana Inc. Ministry of Social Protection National Commission for the Family National Commission on Disability Guyana Council of Organisations for Persons with Disabilities A deaf citizen Caretaker of a deaf citizen Independent sign language interpreter
Indigenous People	Waramadong Village, Region 7 Moraikobai Village, Region 5 Amerindian People's Association Santa Rosa, Moruca, Region 1 Kako, Mazaruni, Region 7 Paramakatoi, Region 8 Lethem, Region 9 Aishalton, Region 9 Kitty, Region 4 National Toshaos Council (NTC)
Youth	International Shotokan Karate Federation Youth rep Essequibo Youth Group Society Against Sexual Orientation Discrimination (SASOD) Guyana (Youth Arm) Ikemba Youth For Reparations Industry/Plaisance Neighbourhood Democratic Council Linden Youth Leaders Recent Secondary School graduate (unemployed) Former Buxton Youth Group Rep/media worker Guyana Youth and Environment Network Love Yourself 592 (Berbice) Mystique Dance and Empowerment Group (teenage mother) Ministry of the Presidency (Teon Coggins - Policy Analyst)

At the start of each session, participants were required to sign a consent form indicating their willingness to participate. Given the logistics involved in convening the sessions originally planned for Lethem, Berbice and other regional towns, the decision was made to organize the sessions in Georgetown because it was logistically better to partner with the various organisations that represent these vulnerable groups and which are all located in Georgetown, and to subsidize the transportation costs to bring the participants from across various parts of the country. This approach ensured that there was better representation from the groups and regions in each session. Participants were each reimbursed for the incurred transportation costs. Session organizers agreed to refrain from taking pictures, recordings or videos during the sessions at the request of associations, in order to respect the privacy needs of participants.

The sessions were structured in 3 segments: 1) The first segment ascertained the views of participants regarding the attitudes of the society towards the group, access to services, and their specific needs. 2) The second segment sought feedback on short promotional videos on the GSDS with suggestions for change. The videos contained messages on development plans in renewable energy, infrastructure, healthcare, education, and agriculture. 3) The third segment determined the most efficient and effective ways of communicating to and reaching vulnerable group members.

2.2 Summary of results and findings

Societal attitudes and discriminatory practices prevail. The *LGBTQ* community wages a constant battle with public opinion and stereotypes about their lifestyle choices. The battle is also an interior one as members often internalize these attitudes and 'self-stigmatize'. While public attitudes are generally homophobic, other LGBTQ related phobias include lesbophobia, transphobia, heterophobia and biphobia. Using public transportation is problematic as members who are recognisably from the LGBTQ community or perceived to be are jeered, harassed, verbally and sometimes physically abused. To a large extent, their family members are not always supportive, requiring some members to move out and to find their own lodging. Some describe that although residents do not interfere with LGBTQ members who live in the community, visitors to the communities often taunt, curse, insult or even physically assault them. The religious community is also not welcoming. Members also felt that some artistes sing lyrics that are anti-LGBTQ, which incite negative behaviours towards group members. In the workplace, stigma and discrimination are high for street/sex workers, but members face varying forms of abuse e.g. being stoned, robbed, assaulted, or cursed. For LGBTQ advocates and public figures, there is still some level of discrimination or stigma but because they have influence in society the discrimination is not as open or blatant.

HIV/AIDS infected persons face a moderate level of stigma and discrimination from family members and residents of the community, and their family members also discriminate but to a lesser extent. There were no complaints about obtaining employment or starting a business. In fact, the stigma

against HIV/AIDS has significantly reduced over the years to the point where there is little to none.

Women feel that they are not respected. While several participants said they are respected in their homes and that they can demand respect elsewhere, they cited the many cases of women being abused in one way or another by their spouses, male family members and even men on the streets. The participants feel that women do not generally have a say. Oftentimes, they remain silent because when they do speak up they can be criticised or abused. Women who are dependent on their partners are less respected. Participants spoke of harassment on the streets and domestic violence as forms of disrespect from males in society. Teenage mothers also complained about not being respected in society. Teachers, nurses, residents, peers, parents and family members all disrespected them in some way because of their pregnancy. Culturally and in religious organisations women's views are not always valued. Additionally, in many instances, women who are single, opined that they are disrespected more than women in relationships as people are inclined to judge them because of their marital status and particularly if they are unwed mothers. Indigenous women recounted that abuse and disrespect were common within their homes, communities, and workplaces. One participant reported being treated unfairly and referred to as "stupid" especially by individuals of different ethnicities and in the workplace.

Persons living with disabilities and the elderly tend to be shut away from society as they are seen as a burden. Family members are sometimes ashamed of them. They are unable to do things for themselves and cannot access needed services and are frequently abused. People are often insensitive and impolite in their treatment of persons in these groups. An example was cited as when people are helping blind persons to cross the street, oftentimes they grabbed their hands and pulled them across the street instead of gently walking with them. Another complaint shared was that when other persons were speaking with the hearing-impaired they would shout believing that this helped the deaf person to hear better. In cases where a hand-sign translator is helping to translate for a deaf person, the communicator often looked directly at the translator rather than at the blind person and often refer to them in the third person. Sometimes the translator would paraphrase the translation. The elderly also lamented the treatment received within their communities, leaving them feeling as if they no longer had value. Decisions were often made without first getting their opinion or agreement.

The Amerindian community were described as close-knit and generally cooperative with each other. Visitors and outsiders to these communities were described as the ones who often discriminated and tended to treat Amerindians unfairly. Amerindians described experiences of being looked at or treated as "stupid" and being referred to as "buck". In Guyana, the term "buck" is derogatory but has now gained popular use to describe any "stupid" person. Particularly during times of elections, Amerindians are noticeably treated well by everyone who wants their vote. A few instances were cited, however, of discrimination between different Amerindian tribes, attributed to one tribe considering itself better than the other. The community also faced abuse and discrimination when leaving their communities to work and live in non-Am-

erindian villages. Amerindians living at or close to mining areas are provided access to alcohol and drugs by outsiders, who often take advantage of females and young males. Disabled family members are largely isolated.

Amerindian women described being treated as a commodity, being abused for sex and that their opinions were not valued. These women described being referred to as "whores" by outsiders and sometimes even by those within their communities.

The majority of young people who participated felt that their opinions were cast aside as invaluable because of their age. Many older folks often criticise the youth and compare their era to the current one while also suggesting that their generation is lazy and wasted time using technology. Criticism is very often less than constructive. Older folks feel threatened by the younger ones, and the perception is that they tended to stifle the young person's creativity. Some lamented that family members dismissed their ideas and passion for culture and the arts. Four of the youth participants believed, however, that when young people are being given opportunities, the older folks have high expectations of them.

Access to jobs and business opportunities are limited for vulnerable persons. *LGBQT* participants recounted personal experiences or shared experiences of other friends and associates struggling or not being able to secure a job once their sexual orientation became known to the prospective employer. Consequently, many are forced to become sex workers. However, the inability to start a business has more to do with process red tape than sexual preferences. One participant shared an experience of a transgender woman being forced to close her food business after it was discovered that she was the owner and cook. Her lifestyle choice had been revealed by someone close to her following a disagreement.

Women generally felt that to get a job or specific position within a company, they had to do more than men. An example was shared that if an advertised position required someone with a Master's degree, the women believed that even if they had the same qualifications and experience as a male applicant, they as females would be overlooked. The participants indicated that the only way a woman would be considered is if she had Ph.D. qualifications. Furthermore, if a particular job required a lot of physical activity men were given preference over women. Some participants felt that the problem was that women were unable to speak up and often settled for less because people are generally socialised to believe that men are superior to women. In some instances, women are their own worst enemies blocking each other from promotions or being hired, particularly if they felt threatened by other women with whom they worked or who were being considered for a job in the same organisation. Women also believed that they were not treated equally in relation to salaries, compared to men, and that there was a lot of sexual harassment in the workplace.

Most *disabled or elderly* participants indicated difficulty getting a job or starting a business. The difficulty involves the challenge of accessing public transportation as most operators do not want to pick them up, while taxis tended

to overcharge them. The access points to the businesses where a vacancy might exist often had many impediments e.g. uneven pavements, staircase access only, or a lack of wheelchair access. Examples were also cited of direct discrimination where one was turned down from the job because of their disability or age. For this group, being elderly is equivalent to being disabled and being disabled equated to being considered as incompetent or incapable. In the workplace, persons in this group related experiences where younger workers felt threatened by the presence of older workers and were ready to cast them aside as soon as they reached retirement age. For persons living with disabilities the work environment presented many challenges as they were often treated as if they were in the way of others. Inequality in pay is another issue and often, their pay is more of a stipend.

Amerindians described being at more of a disadvantage than other groups when seeking jobs because they do not have equal access to education and hence are less qualified. Furthermore, there are less opportunities in their communities, which resulted in their members having to move away from villages and families to access good jobs. Another problem is the lack of access to information about job opportunities across the country since newspapers are not readily available in their communities. Access to radio stations and the internet is limited or unavailable to some communities, which generally means that they do not necessarily receive information in a timely manner.

Accessing loans to start businesses has been a challenge for many Amerindians as their lands owned in common (communal land). Hence, providing security of property title or proof of address remains a significant barrier. There are also no public office services available to hinterland communities where applications can be filed so Amerindians have to travel to Georgetown at high cost to establish their businesses. Inequality of pay is a problem Amerindians regularly face with their employers, who often fail to pay NIS contributions especially for workers who operate in hinterland areas. Employers are also described to have minimal expectations of their Amerindian workers. To get recognition on the job, it was perceived that Amerindian men have to work twice as hard as do other groups, while women have to work thrice as hard.

Youths had the perception that it was mostly difficult to get a job after completing secondary school as most jobs required experience and higher qualifications. Some rural communities offered very limited job opportunities. Another challenge identified for youths attending evening classes was that employers are not inclined to hire those attending evening classes because they anticipate having to give them time-off for exams and assignments. Workplace attitudes as described by youth are a contrast to the views of older persons (above), whom the youths described as preventing them accessing opportunities to grow. Older persons are perceived as stifling youths in the workplace, instead of serving as mentors.

Access to healthcare services is impeded by the prevailing attitudes. Not all health workers are as friendly or professional towards members of the *LGBTQ* and *HIV/AIDS* communities. There have been instances where LGBTQ members complained of being mocked or chided for their lifestyle choice, while for HIV/AIDS persons there are still a few instances where medical work-

ers have exposed the status of an individual from their community to other people. The effect of this is that some members are hesitant to seek medical care or they choose to go to private doctors, which can be quite expensive. Some would opt to go to a clinic outside of their community so that they do not have to encounter anyone they may know. Others only seek medical care whenever they get an opportunity to travel abroad.

Women generally reported easier access to healthcare services, except for teenage mothers who recounted instances of poor treatment by healthcare workers, who were condescending and insulting to them during visits to the clinics or the hospital, except when accompanied by an adult. Pregnant or teenage mothers are often insulted and ridiculed. Although services are available, they were reluctant to attend because of the frequent ridicule.

Persons with disabilities and the elderly indicated that healthcare services were generally accessible but that barriers included lack of proper infrastructure facilities and the aforementioned problems of accessing public transportation.

Amerindians recount that healthcare services are not readily available or accessible. In some communities existing health centres are not adequately staffed and are very far away from villages. Access is rendered difficult because of a lack of transportation or proper road infrastructure.

Most *youths* tended not to experience issues accessing healthcare services. At least three (teenage/pregnant mothers), however, witnessed a different experience and spoke of being ridiculed or of observing other young women being ridiculed when seeking sex and/or pregnancy related healthcare services. Two incidents were recounted in Georgetown and the other in Essequibo.

Access to education services can improve with increased awareness. For *LGBTQ* persons whose lifestyle choices were known, primary or secondary school years meant being laughed at, called derogatory names and bullied. Oftentimes, this forced the affected person to drop out of school or to perform poorly, hence many do not advance to tertiary education. Evening classes are not easily accessible as the cost is a deterrent.

Conversely, the health status of *HIV/AIDS* affected persons does not impede access to education services because stigma and discrimination have been significantly reduced from increased awareness.

Women shared that generally access to education was easy, except for those who became pregnant while in school. Teenage mothers often leave school by force or choice but are frequently ridiculed by their peers and teachers when they return to school after delivery. Additionally, access to education as a young mother was difficult because the child would require a caretaker, which could be cost-prohibitive.

Persons with disabilities and the elderly described that there were very few institutions which catered to the needs of this group. For the hearing-im-

paired, it is worse because sign language is hardly taught or practiced anywhere in Guyana. Members of this vulnerable group are treated as if they were incapable of doing much, expectations are low at home and in society and this affects their education, growth and development.

For *Amerindians*, access to education is a challenge because of inadequate road infrastructure to get to most schools in the villages. Additionally, the schools are not adequately staffed and the subject areas offered are not as broad as they are at schools in the coastland regions. Access to technology and information in education is relatively non-existent in Amerindian schools. At the tertiary level, Amerindians must leave their villages to attend university or other tertiary institutions. Accommodation and food costs are high and without support systems attending university becomes prohibitive. For those who have scholarships, the stipend is far from enough to even provide meals for one week

Youths under 17 years of age who already completed secondary school complained that they could not advance to tertiary level education because of their age. For those living outside of Georgetown, it has been difficult to access tertiary education given the prohibitive transportation cost to travel from Essequibo or Linden for example, to attend the University of Guyana at Turkeyen. Another impediment to accessing education services is the unaffordable cost of tertiary education.

Access to social services and housing is problematic and sometimes cost-prohibitive. Accessing shelter or housing is difficult for *LGBQT* persons because of discriminatory practices and also because of cost. Many such persons cannot afford their own housing and have to depend on others who are generally not accommodating, and in instances when they are accommodated in a room, they must suffer through verbal abuses, which create an uncomfortable living environment. The Police oftentimes also discriminate against members of the LGBTQ community once they become aware of the person's lifestyle. Persons with *HIV/AIDS* however reported that it was not difficult to access social protection services.

Women who needed shelter and counselling services because of an abusive relationship accessed these services easily. However, getting Police intervention and assistance to deal with abuses in the home was a challenge. Child welfare support and services such as counselling, home visits and school visits are a challenge.

Persons with disabilities and the elderly indicated that access to social services was a major issue. They frequently experienced inadequacies in housing, access to facilities, in stipends, which are not offered for assistance with hearing aids. Running errands and moving between Ministries for services was a hassle and an inconvenience. With regard to accessing pensions from the National Insurance Scheme (NIS), if the pensioner lived outside of the capital Region 4 (Georgetown) then access to the services took double the amount of time than it would for someone living within the Region. Typically, the application had to be made at the local NIS office in the district where the pensioner resides and that office will then forward the application to the

main office in Region 4, where the processing of applications is centralised. The pensioner then had to wait for the process to be completed by the Region 4 office before the processed application could be returned to the NIS office in his/her district. Apart from the length of time, one complaint was that sometimes applications were stalled if the Region 4 office had queries and the pensioner was not contacted. The queries were only communicated to the applicant when he or she called the office to enquire about the status of their application.

For the *Amerindian* community, access to social services was a major issue since these were not located within the community. Priority needs are for proper housing and accommodation for vulnerable women and children, mental healthcare, clinics, and counselling in schools. As it related to the police, their perception was that officers assigned to work in Amerindian or remote communities were sent there as punishment; hence those communities suffered as the officers continued their bad behaviours knowing that they were not being monitored or controlled. The general view was that police officers were corrupt and took advantage of Amerindians. Many therefore cannot be assured of due justice because the victimised often paid bribes to the police.

GSDS video messages were well understood but needed to be more targeted and inclusive to needs. The groups recommended that communications messages should more directly address issues faced by vulnerable groups e.g. the need for legislation, education, specific benefits. There could also be a more specific video that speaks to human rights, provision of legal aid and what actions would be taken to ensure that vulnerable groups do not continue to be marginalised and discriminated against. Generally, participants shared that videos should be more relatable so that the benefits offered could be better understood. Videos should also have a sign language interpreter and/or subtitles. Videos should also be in the Amerindian languages and show more of the Amerindian communities and what specific benefits were to be derived.

Information is accessed mainly through social media channels. Most participants, particularly the youths, get their information from social media, primarily Facebook, which is also the preferred media for receiving information and most frequently used at their locations. Social media and the internet is primarily accessed via their mobile phones. A few persons preferred use of text messaging apps. One participant identified Radio and Television as the main source of news with the more popular radio stations identified as 94.1FM, 93.1FM and 97.1FM. Print media is also an important source for information with Kaieteur News being the most popular, followed by Stabroek News and the Guyana Chronicle.

For Amerindian communities information is often transmitted by word of mouth, for example, through the National Toshaos Council, the Amerindian People's Association and religious groups and leaders, because access to radio, TV and Internet is very limited. Information is also transmitted through printed brochures or shared at local council meetings.

The top three needs of each focus group, as identified are summarized in Table 2 below.

TABLE 2

Needs as identified by vulnerable group

Focus Group	Top Three Identified Needs	Other Identified Needs
LGBTQ	1) Education – regular access without discrimination and remediation for dropouts 2) Mental health care services 3) Job opportunities	Housing Stronger legislation to protect rights of this vulnerable group - hate crime prevention and human rights laws Access to free Pre-exposure prophylaxis (or PrEP) treatment Better protection/security from police Awareness for the rest of society to end discrimination
HIV/AIDS	1) Housing 2) Mental health care services 3) Job opportunities	Education
Women	1) Affordable housing 2) Respect 3) More support networks	• Gender equality • Empowerment education • More counsellors • More safe spaces • Night School for single unqualified mothers and child-care night services for their children • Affordable housing • Education • Social Networks • Counselling Services • Community Support in raising children

Focus Group	Top Three Identified Needs	Other Identified Needs
Persons living with disabilities **The elderly**	1) Education 2) Social Services 3) Healthcare	• Better streamlining of all public services • Better legislation for inclusion in the work force • Better legislation for equal pay • Access to adequate social, educational, and healthcare services outside of Region 4 • Public assistance • More social safety nets • More interpreters • Build awareness to foster inclusion • Enforcement of all aspects of the Disability Act • Activities for the elderly • Wheelchair-friendly buildings and sidewalks Increased financial aid as pensions are inadequate
Indigenous People	1) Equal accessed to education at all levels and in the language of the various communities 2) Equal access to adequate healthcare services with assistance to remove the language barrier 3) Better protection and security	• Preservation of culture through education and their language must be recognised and taught in schools • Social Services • More social safety nets • A means of using their property to access loans • Access to opportunities to start a business
Youths	1) Job opportunities 2) Affordable housing 3) Affordable tertiary education	• Economic/financial stability • Relationships

2.3 Conclusions and recommendations

While discrimination against HIV/AIDS infected persons has declined, it still persists for other vulnerable groups. Awareness raising about the plight of the poor and vulnerable must be a continuous and on-going process nationally for the responsible service-oriented public institutions and civil society groups. However, it must be specifically targeted at public and private sector employers. Guyana's Constitution enshrines the basic rights and protections afforded to its citizens[1] and it provides for a total of eleven constitutional commissions to protect those rights. Two of these are the Women and Gender Equality and the Indigenous Peoples Commissions. Apart from these, the Ministry of Social Protection is charged with providing social safety net services for the most vulnerable and disadvantaged in Guyana, as well as shelters and counselling for abused persons, especially women and children. The functions and work of these national institutions can be strengthened and supported to better address issues of discrimination that persist across the society, particularly in respect of public services e.g. administration, housing, health, education and transportation, and which probably also contribute to inequality of services, benefits and opportunities. Actions to eliminate discrimination and inequality can also be complemented by national social media campaigns that promote the rights of all individuals and an end to all forms of discrimination and abuse.

National communications campaigns that inform or advise on development action and/or benefits must better refine the messages to the specific needs of vulnerable groups. The key point is that vulnerable persons often do not have or enjoy the same or any of the privileges of ordinary citizens, related to information and media access and technology. Information is therefore not directly or readily available to those who need it most. A greater effort can be made by providers of essential or other support services to ensure improved equity in dissemination of or access to information. To that end, Facebook and mobile text messaging are the key identified channels for disseminating information to vulnerable persons; Kaieteur and Stabroek Newspapers are also important media, and for indigenous communities messages should be communicated to their Toshaos.

All vulnerable persons are in need of better income-earning and employment opportunities. These needs are at the core of their vulnerabilities but are also dependent on strategic projects that are better designed, targeted and executed to deliver the benefits and to close equity gaps. This is the chronic coastal vs. hinterland development conundrum in Guyana that must be elevated higher in the matrix of development priorities and within all sectors.

BLUE MOON
NATIONAL
SOUTHERN
13
12
11
10
9
8
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CHAPTER 3

GSDS COST ESTIMATES

CHAPTER 3

GSDS COST ESTIMATES[2]

3.1 Objectives of the costing exercise

A key requirement for the successful financing, planning and implementation of Guyana's *Green State Development Strategy: Vision 2040* is an appropriate costing of its policies. Although a majority of the policies were not previously costed, estimated costs for hard investments in transport infrastructure and coastal defence were already provided in Volume I. As the priorities laid out in the Strategy are taken forward for development, the Ministry of Finance and other implementing Ministries will need an understanding of the overall budget implications of the Strategy, as well the cost estimates for key projects. The premise is that a clear understanding of aggregate financing needs will help the Government of Guyana better select the most appropriate funding sources from those available and structure a coherent, phased implementation schedule. The discussion below describes the approach and methodology used to develop the cost estimates.

3.2 Approach to Estimating Budget Costs

The initial steps were to establish a foundation of knowledge on how national budget estimates are currently elaborated. First, it was important to understand how the Ministry of Finance (MoF) and other implementing Ministries estimate their respective future budgets under a medium-term expenditure framework (MTEF). A second step built on this knowledge was to leverage existing projection methodologies and devise new methodologies to arrive at a global estimate of spending required for the Strategy's implementation.

A diagnostic of Guyana's most recent national budgets was conducted to better understand the existing framework and select the most appropriate reporting level. Within Guyana's budget volumes, there is a hierarchy of categories against which spending is reported, cross-referencing Ministries, programmes, agencies and statutory institutions against different lines of expenditure. Before analysing the Strategy's cost impact, the hierarchical level must first be identified (for example, department, programme or agency) and for each recommended policy. The best choice balances granularity and aggregation, ensuring adequate matching with the Strategy's policy recommendations and to ensure that the level of detail remains tractable.

For each policy intervention, material differences in spending patterns as a result of implementation of the Strategy were identified. Each policy intervention with budget spending units were identified, differentiating areas with critical budget implications from those with limited financial impact (i.e. those with mostly regulatory or administrative adjustments). In order to elaborate appropriate costing methodologies, each of the Strategy's policies

were sorted into one of the following cost categories, as each has a different costing approach:

- *Consultancy projects*: Many policies proposed in the Strategy require a better understanding/situation analysis, detailed design of appropriate solutions to address challenges, or development of an action/implementation plan to improve the current situation. In all these cases, the policy does not directly imply an immediate on-the-ground transformation of the situation, but it does create the required condition for a more effective and efficient intervention at a later stage. These policies can be implemented via consultancy projects, the cost of which usually varies according to the level of effort (number of consultant-days) and technical expertise required. For projects identified within this category, broad estimates of the expenditures involved were developed.

- *Expanding/modifying the operational expenditure of programmes*[3]: Beginning with existing programme budgets, an inference is made to understand how the policy expands or modifies the operational scope then an estimate is made of the cost variation associated with it. If the programme is new, existing programmes can be used as proxy/references for cost drivers, but the estimates are done from a base of zero.

- *Expanding/modifying staff and administrative costs of statutory bodies*[4]: In the case of new regulations or policies, this usually implies new functions or staff to be incorporated in order to design, execute and monitor implementation. In this case, an analysis was made about which way the Strategy would expand or modify functions and then an estimate of the cost variation associated with incorporating any new functions or responsibilities.

- *Expanding the scope of existing or creating new capital investment projects*: In this case, an analysis was made on whether the Strategy's proposed projects were already considered in the budget and, if so, a further assessment of whether their extent is different in some way. If the reach is modified, an estimate of the variation was based on the costs of existing projects. Even if the project is totally new, existing projects may still serve as proxy/references for cost drivers, but the estimates are still calculated from a base of zero.

The cost impact horizon for each policy was also estimated. The large majority of policies have cost implications for the short-term (defined as the MTEF horizon and assumed to be until 2024). For the costing exercise to be useful, this must be consistent and compatible with the incoming MTEF, which implies that the dimensions of the analysis and the core outputs must match those within the MTEF proposals. However, many policies will also have cost implications in the medium-term, affecting regular expenditures and capital investments during the remaining years of the Strategy's horizon (up to 2040). In this regard, it is not feasible to define which exact measures or projects will be executed until 2040. However, it is possible to set a performance ambition (for instance, increase in nursery school enrolment rate), identifying the variation of performance needed and then estimating the variation of investments/costs associated with the ambition.

3.3 Assessment of aggregate spending

The assessment comprised an initial estimate of aggregate spending of the 216 policies presented in the Green State Development Strategy. For each policy, the potential drivers of cost and investment impact are identified and briefly explained. Each driver is categorized into four cost or investment groupings: consultancy project, capital investment, policy or programme operational expenditure and staff and administrative costs. An assessment is then made of whether the impact would be felt only in the short-term or whether there will be cost or investment implications in the medium-term. Finally, each policy is associated with its budget agency and programme or that of a statutory agency, providing all necessary elements for adequately launching the costing exercise.

Most policies have investment or cost implications over the short-term, while almost half imply cost/investments in the medium-term. Out of 216 policies, 198 were found to have some cost/investment implication in the short-term (up to 2024). For 102 policies, cost/investment impacts are anticipated for the medium-term (up to 2040).

Out of the 216 GSDS policies, 40% imply consultancy projects and another 40% additional staff/administrative costs. 85 policies imply additional investments on consultancy projects or research studies. 87 policies result in additional staff or administrative costs, particularly related to expanded capacity for the related budget agency or statutory body. By contrast, 37 pol-

icies require increases of policy/programme operational expenditure and 41 need additional capital investments.

3.4 Refining the cost estimates

After the initial assessment, next steps were to refine the cost estimates. This included detailed revision of costing methodologies for each policy, incorporating feedback and additional data provided by stakeholders. The cost estimates were disaggregated by policy level, with individual costs estimated for each of the 216 policy recommendations. Additionally, the time horizon of each policy was segregated for cost impacts in the short-term (aligned with MTEF) and medium-term (2040), as discussed before.

Analyses of publicly available budget information were conducted. The objective was to assess the best/latest data available, so as to develop estimates that are as aligned as possible to Government figures, identify potential information gaps and propose the most effective way to close them. In that regard, the most relevant data for the Strategy's costing exercise is Guyana's "*Estimates of the Public Sector: Current and Capital Revenues and Expenditures*" – Volumes 1 and 2 (i.e. the Budget, 2019) particularly:

- *Central Government current appropriation expenditure (Volume 1)*: this is at the core of budget data, presenting expenditures for all Government agencies, subdivided in many cases into various "programmes". It is im-

portant to notice that the definition of "programme" used in the 2019 Budget is not necessarily oriented to specific policies or objectives, but linked to action areas and the operational divisions of the different ministries (e.g. Nursery Education, Primary Education, Secondary Education). As explained in the previous section, each policy is associated with a specific budget-related agency and, whenever possible, to specific agency programmes.

- *Budgets of constitutional commissions and statutory bodies (Volume 1)*: The analysis suggests that in many cases, the policies do not affect directly a ministry, but specific statutory bodies, such as the Guyana Revenue Authority (GRA), the Guyana Office for Investment (GOInvest) or the Environmental Protection Agency (EPA). The last section of Budget Volume 1 (Appendix T) presents estimates for statutory bodies. Wherever appropriate, the cost implications are associated to specific statutory bodies, and not to ministries. A key concern is the disruptive impact of the beginning of oil production, which should allow a significant expansion of 2020 expenditures in relation to the 2019 estimates, with a meaningful increase of expenditure/investment of different agencies and statutory bodies. In this regard, using 2019 data to project forward implications may imply risks of underestimation, leading to lower cost/ investment projections.

- *Capital expenditure (Volume 1)*: Many of the Strategy's policies are associated with capital investment projects, while related investments need to be assessed on an individual, project-by-project basis. The starting point of the analysis is at the capital projects already considered in the annual Budget data (ref. the second half of Budget Volume 1), which include some proposed investments under the GSDS. Here, it is important to note that the majority of proposed projects will not be present in the annual budget and therefore need to be independently evaluated. However, even for these cases, existing projects can be leveraged to derive useful estimates (e.g. cost per km of sea defences, new roads, or rehabilitation of existing ones). Risks of underestimation may also be more relevant to capital expenditures since investment is usually the first category to adjust to overall budget expansions or contractions. In addition to this limitation, budget lines are more aggregated than GSDS policies, making matching difficult (e.g. there is a single budget line for "Sea Defences", with no specification for what will actually be executed for the proposed budget).

- *Medium-term Macroeconomic/Expenditure Frameworks (Budget Volume 2)*: The first section of Volume 2 presents initial MTEF estimates to year 2022. This is a critical piece of information for the costing exercise, since the four-year MTEF projections are directly related to the cost horizon for the majority of the GSDS recommended policies. The results of this costing exercise should also connect to MTEF projections in an effective and efficient manner, allowing for clear understanding of the implications of the Strategy on national accounts. However, there were important limitations regarding the level of detail presented for expenditure estimates, which is the most relevant information for the costing exercise. For current expenditures, the figures were not detailed by agency or statutory body, but by "sector" (e.g. economic services, social services, infrastructure), which render more difficult its relation to annual budget data. Details were also not

presented on the composition of the figures, not even by programme level. For capital expenditure, there are aggregates by agency level, but no information on the assumptions considered and the composition of investments.

- *Performance statements and baseline performance indicators (Budget Volume 2)*: The second and largest section of Budget Volume 2 presents programme performance statements, with a baseline of performance indicators and targets. As this provides a forward-looking view on expected performance of the different agencies and their respective programmes, this information is critical for setting a performance ambition for the Strategy's longer term horizon and, therefore, an estimate of required expenditures and investment to achieve such ambition.

In summary, therefore, despite some risk of underestimation with use of Budget 2019 figures, the expenditure estimates for agencies, programmes and statutory agencies are still leveraged in the costing exercise. Despite the limitations of using Budget 2019 figures for estimating the Strategy's cost implications, specific questions on data gaps were elaborated during consultation meetings with stakeholders. Nevertheless, the cost estimates should, as a matter of practice, be improved through application of more precise Budget 2020 data, in order to increase the reliability and usefulness of the cost estimates.

3.5 Consultations with the Public Health Sector

GSDS policies for the public health sector are more broadly defined with a lack of specificity on sector interventions. As a result of less clarity on the scope and scale of the public health sector strategies and associated interventions, a clearer perspective of the scope and ambition of the transformation was needed for better accuracy of the cost estimates.

In order to cost the associated GSDS policies, a follow-up consultation meeting was organized with the Ministry of Public Health (MoPH) to support the development of its new sector plan and for a clearer understanding of the planned strategic interventions. Given the size of the public health sector, the additional consultations were a follow-up to the 1st consultation meetings conducted during November 2019, and consisted of a dedicated schedule with heads of units and senior staff of MoPH programmes during the week of February 10th – 14th 2020. Meeting participants included MOPH staff, heads of units and programmes. The outcomes of the consultations helped to reduce information gaps and provide clarity on the scope and scale of associated interventions, as well as a better understanding of the cost drivers of these interventions.

The Health Sector budget programmes that were consulted included:

- P. 431 - Policy Administration
- P. 432 - Disease Control
- P. 433 - Family Health Care Services
- P. 434 - Regional Clinical Services
- P. 435 - Health Sciences Education
- P. 436 - Standard and Technical Services
- P. 437 - Disability and Rehabilitation Services

During the consultations, a total of 70 interventions were identified for implementing the 16 GSDS policies. For all identified interventions, the scale and cost of implications were extensively discussed and incorporated in the overall GSDS cost estimate, notwithstanding time limitations and availability of officials. Although many of the interventions would require detailed review at a later stage, as recommended to participants, these nonetheless provide solid building blocks for the development of a strategic plan for sector transformation in the medium-term, in accordance with GSDS development objectives.

3.6 Conclusions

A few conclusions can be made on the cost estimation exercise:

Validation meetings with line Ministries allowed progress on the development of cost estimates in several areas. It was possible to achieve solid validation in areas such as Public Infrastructure and Education. In other areas, such as Natural Resources (especially Forestry), Business (especially Tourism), and Agriculture (especially Rice), it was possible to improve initial assumptions and consolidate preliminary estimates, but there is still need

and scope for further improvements and adjustments of the estimates during subsequent budget revisions.

For some policy areas, calculating costs were challenging, since structured strategic plans and quantitative ambitions for performance evolution were lacking. This was very significant for the Ministry of Public Health (MoPH), but it also affects other Ministries such as Business and Telecommunications. In Public Health, the additional cost validation meetings of February 2020 provided a lot of detail. As a result, a total of 70 interventions were identified for implementing the 16 GSDS policies for the sector, with associated scales of intervention and costs. These interventions represent solid building blocks for the construction of a strategic plan for sector's transformation in the medium-term, but they do require detailed revision and prioritisation during Budget 2020 review. This is particularly true for measures on the significant expansion of staff and administrative costs on a permanent basis, such as the new Specialist Hospital in Georgetown, transportation of patients and converting all Health Posts to Health Centres. These 3 interventions combined represent about 75% of total staff and administrative costs to be added on an annual basis.

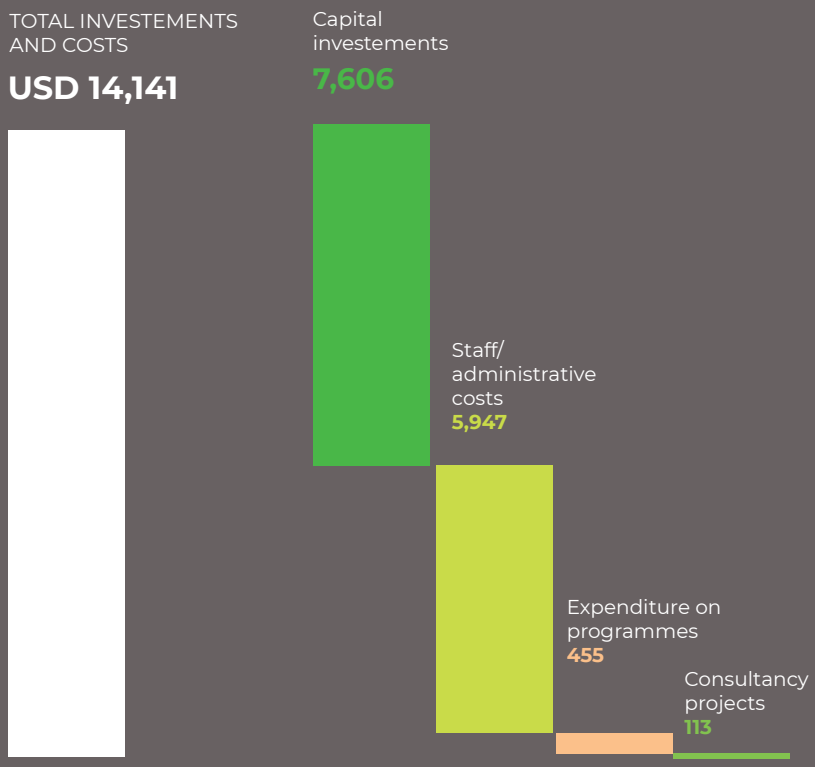
For other policy areas, preliminary cost estimates were conducted, but the level of precision is limited given the existence of uncertainty regarding critical policies and strategies by the Government of Guyana. This is the case for policy areas such as Land Governance (CHPA and GLSC) and Energy. For the latter, there is still significant uncertainty on the future and transition mix for energy generation, including the role of natural gas as transition fuel. Lacking clear policy orientations, it was assumed that the energy mix will advance primarily towards renewable sources, with the exception of the proposed dual fuel generating plants already contracted by Guyana Power & Light (formally announced on February 2020). For those policy areas facing policy uncertainty, continuous collaboration with public agencies and line ministries in the upcoming months should support decision-making, allowing a reduction of uncertainty and higher precision in cost and investment estimates.

3.7 Results of the Cost Estimates

The total estimate of the cost of GSDS policies[5] amount to USD14.14 billion. Preliminary estimates indicate a total of USD 14 billion (values expressed in USD millions of 2019), concentrated on capital investments and staff and administrative costs, as shown in the figure below:

FIGURE 1

Preliminary estimates indicate a total of almost USD 14 billion (2019 US$), concentrated on capital investments and staff/administrative costs



In terms of policy areas, the most relevant in terms of costs is Infrastructure, with costs and investments amounting to USD 5 billion (mostly capital investments), followed by Education (USD 2.9 billion) and Health (USD 2.4 billion). Infrastructure as expected, is concentrated on capital investments, while for Education and Health, the majority of expenditures are focused on Staff and Administrative expenditures. With over USD 1 billion, Energy is also a relevant area, especially on capital investments for generation. However, for Energy and other areas facing policy uncertainty, continuous collaboration with public agencies and line ministries in the incoming months should support decision-making, allowing a reduction of uncertainty and higher precision in cost/ investment estimates. The total cost estimates by policy and type of intervention are provided in Table 3.

TABLE 3

Summary of GSDS cost estimates by type of policy intervention (2019 US$ millions)

Ref #	Policy Area	Consultancy Projects	Capital investment	Policy/ program oper. expend.	Staff & Adm. Expend.	TOTAL
1. Manage Natural Resource Wealth						
A. Sound Fiscal and Monetary Policy						
A1	Fiscal Policy	1.0	-	-	927.4	**928.4**
A2	Monetary Policy	-	-	-	-	**-**
B: Sustainable Management of Natural Resources						
B.1	Land Resources	37.4	-	-	57.4	**94.8**
B.2	Water Resources	1.3	-	-	36.5	**37.8**
B.3	Forest Resources	0.9	-	1.0	78.3	**80.3**
B.4	Biodiversity and Ecosystem services	11.3	-	-	5.7	**17.0**
B.5	Precious Metals, Mineral and Aggregate Resources	1.8	-	-	-	**1.8**
B6	Traditional Knowledge and Practices	1.0	-	-	24.2	**25.3**
2. Support Economic Resilience						
C: Green and Inclusive Economic Diversification						
C.1 Resource extraction for sustainable development						
C1.1	Mining	1.6	9.4	20.0	2.4	**33.5**
C1.2	Oil and Gas	1.2	-	-	25.2	**26.4**
C1.3	Timber Production and Processing	0.4	-	35.3	4.6	**40.2**
C1.4	Fishing and Aquaculture	1.3	-	1.0	4.5	**6.8**
C.2 Sustainable, productive and climate resilient Agriculture and Value-added Processing						
C2.1	Sugar	1.6	-	-	-	**1.6**
C2.2	Rice	0.5	-	87.5	43.2	**131.1**
C2.3	Fruits and Vegetables	-	-	48.4	-	**48.4**
C.3 Green, inclusive and high value-adding Service Industries						
C3.1	Travel and Tourism	0.1	3.0	48.9	25.4	**77.4**
C3.2	Business Process Outsourcing (BPO)	0.1	15.8	106.9	13.8	**136.6**
C.4 Strengthening the Business Environment						
C4.1	Institutional Quality and Public Sector Services	4.5	60.0	-	136.8	**201.3**
C4.2	Business regulation and private sector services	3.0	6.0	-	25.2	**34.3**

Ref #	Policy Area	Consultancy Projects	Capital investment	Policy/ program oper. expend.	Staff & Adm. Expend.	TOTAL
D: Transition to Renewable Energy						
D1	Renewable and clean energy sources	2.5	1,009.4	-	-	**1,011.9**
D2	Renewable and Clean Energy Use in the Power Sector	2.7	229.1	0.2	8.0	**240.0**
D3	Energy Efficiency	0.5	50.0	-	1.6	**52.1**
D4	Sustainable Transport Sector	1.4	57.0	-	-	**58.4**
E: Resilient Infrastructure, Green Towns and Urban Public Spaces						
E1	Road Transport	1.3	2,262.6	-	-	**2,263.9**
E2	Ports	1.3	1,022.3	-	-	**1,023.5**
E3	Airports	-	60.0	-	8.6	**68.6**
E4	Information and Communication Technologies (ICT)	-	189.5	-	-	**189.5**
E5	Coastal Protection Infrastructure	-	838.6	1.0	41.3	**880.8**
E6	Inclusive and Green Urban Settlements	38.6	148.8	2.3	80.8	**270.6**
F: Trade, Investment and International Cooperation						
F1	Advance Action on Existing Trade Agreements	-	-	-	15.0	**15.0**
F2	Implement Supporting Standards	0.1	-	-	1.3	**1.4**
F3	Promote and Support 'Green' Goods	0.5	-	-	-	**0.5**
3. Build Human Capital and Institutional Capacity						
G: Healthy, Educated and Social Cohesive Population						
G1	Public Health and Well-Being	13.0	318.6	19.0	2,035.8	**2,386.5**
G2	Education	-	1,322.7	32.4	1,504.4	**2,859.5**
H: Good Governance, Transparency and Knowledge Management						
H1	Governance and Citizen Participation	0.7	-	-	162.1	**162.8**
H2	Rule of Law and Strong Institutions	1.1	-	-	445.6	**446.6**
H3	Decentralisation and Local Governance	0.2	-	-	16.3	**16.5**
H4	Land Governance	-	3.6	-	97.3	**100.8**
H5	Knowledge Management, Information and Communications	-	-	0.1	82.5	**82.6**
	TOTAL	**133**	**7,606**	**454**	**5,947**	**14,141**

Table 4 summarizes the costing of GSDS policies by year of expected implementation. From the total cost estimate of USD 14 billion, more than USD 10 billion dollars are concentrated in the medium-term horizon: USD 3.9

billion in 2020-24; USD 3.9 billion in 2025-29 and USD 6.4 billion in 2030-39. Although costs for consulting projects and operational expenditure for policies and programmes are mostly in the short-term, they are relatively limited in relation to other cost categories. In addition to its occurrence mostly in the medium-term, staff and administrative costs are expansive, which requires word of caution on interventions that add budget expenditures on a permanent basis, especially for the Health and Education sectors. Some critical and still uncertain capital investments, such as the Amaila Falls hydropower generation project and the proposed new Specialist Hospital in Georgetown are also placed in the medium-term. These can lead to significant revisions in medium-term estimates at a later stage.

TABLE 4

Summary of GSDS cost estimates by period of intervention, 2019 US$ millions

		Short-term						Medium-term		
Ref #	**Area**	**2020**	**2021**	**2022**	**2023**	**2024**		**2025-29**	**2030-39**	**TOTAL**
1. Manage Natural Resource Wealth										
A: Sound Fiscal and Monetary Policy										
A1	Fiscal Policy	10.4	21.2	31.6	41.6	51.9		257.2	514.4	**928.4**
A2	Monetary Policy	-	-	-	-	-		-	-	**-**
B: Sustainable Management of Natural Resources										
B.1	Land Resources	0.5	1.9	14.6	14.1	14.4		16.4	32.8	**94.8**
B.2	Water Resources	0.2	1.1	1.3	0.9	1.1		11.1	22.1	**37.8**
B.3	Forest Resources	0.9	2.3	2.6	4.5	4.8		21.8	43.5	**80.3**
B.4	Biodiversity and Ecosystem services	0.6	1.3	5.2	5.2	4.6		-	-	**17.0**
B.5	Precious Metals, Mineral and Aggregate Resources	0.1	0.8	0.8	-	-		-	-	**1.8**
B6	Traditional Knowledge and Practices	0.4	0.5	1.3	1.5	1.3		6.7	13.5	**25.3**
2. Support Economic Resilience										
C: Green and Inclusive Economic Diversification										
C.1 Resource extraction for sustainable development										
C1.1	Mining	0.5	3.6	4.6	5.1	4.3		4.6	10.8	**33.5**
C1.2	Oil and Gas	1.4	3.2	3.0	3.6	3.7		3.8	7.7	**26.4**
C1.3	Timber Production and Processing	1.0	2.8	3.6	5.3	5.7		6.7	15.1	**40.2**
C1.4	Fishing and Aquaculture	0.1	1.1	1.1	0.3	0.5		1.3	2.5	**6.8**

		Short-term						Medium-term		
Ref #	**Area**	**2020**	**2021**	**2022**	**2023**	**2024**		**2025-29**	**2030-39**	**TOTAL**
C2.2	Rice	2.4	5.8	7.1	7.9	8.2		31.0	68.7	**131.1**
C2.3	Fruits and Vegetables	0.5	1.6	2.6	3.3	3.7		11.0	25.6	**48.4**
C.3 Green, inclusive and high value-adding Service Industries										
C3.1	Travel and Tourism	2.5	6.8	6.8	6.1	7.1		22.7	25.3	**77.4**
C3.2	Business Process Outsourcing (BPO)	6.6	12.2	12.2	12.4	12.5		65.2	15.6	**136.6**
C.4 Strengthening the Business Environment										
C4.1	Institutional Quality and Public Sector Services	2.3	4.2	6.4	7.7	8.5		67.4	104.8	**201.3**
C4.2	Business regulation and private sector services	0.5	3.0	2.6	2.6	2.6		7.6	15.3	**34.3**
D: Transition to Renewable Energy										
D1	Renewable and clean energy sources	48.2	47.4	47.9	71.8	70.6		217.8	508.2	**1,011.9**
D2	Renewable and Clean Energy Use in the Power Sector	1.0	32.8	32.2	48.0	48.0		39.0	39.0	**240.0**
D3	Energy Efficiency	0.7	4.4	4.4	6.4	6.4		21.0	9.0	**52.1**
D4	Sustainable Transport Sector	0.1	4.3	4.8	6.6	6.6		18.0	18.0	**58.4**
E: Resilient Infrastructure, Green Towns and Urban Public Spaces										
E1	Road Transport	-	231.1	231.7	347.3	346.7		553.6	553.6	**2,263.9**
E2	Ports	-	4.5	5.1	7.3	6.7		500.0	500.0	**1,023.5**
E3	Airports	1.0	8.9	8.9	12.4	12.4		15.0	10.0	**68.6**
E4	Information and Communication Technologies (ICT)	-	11.6	11.6	17.4	17.4		65.7	65.7	**189.5**
E5	Coastal Protection Infrastructure	0.6	59.4	59.8	88.9	89.7		285.7	296.7	**880.8**
E6	Inclusive and Green Urban Settlements	2.7	14.9	24.7	28.7	25.6		76.9	97.1	**270.6**
F: Trade, Investment and International Cooperation										
F1	Advance Action on Existing Trade Agreements	1.0	1.9	2.0	2.1	2.2		1.9	3.9	**15.0**
F2	Implement Supporting Standards	0.1	0.3	0.3	0.3	0.4		-	-	**1.4**
F3	Promote and Support 'Green' Goods	-	-	0.4	-	0.1		-	-	**0.5**
3. Build Human Capital and Institutional Capacity										
G: Healthy, Educated and Social Cohesive Population										
G1	Public Health and Well-Being	21.1	72.8	87.6	118.9	133.7		472.5	1,479.9	**2,386.5**

		Short-term						Medium-term		
Ref #	**Area**	**2020**	**2021**	**2022**	**2023**	**2024**		**2025-29**	**2030-39**	**TOTAL**
G2	Education	6.7	134.7	140.2	145.9	151.7		890.4	1,389.7	**2,859.5**
G3	Social Cohesion and Diversity of Cultural Expression	3.4	6.4	6.4	6.4	6.4		21.4	36.4	**86.7**
H: Good Governance, Transparency and Knowledge Management										
H1	Governance and Citizen Participation	5.3	10.9	11.2	11.1	11.5		37.6	75.3	**162.8**
H2	Rule of Law and Strong Institutions	9.3	18.6	20.7	22.0	23.0		117.7	235.4	**446.6**
H3	Decentralisation and Local Governance	0.4	0.8	0.8	0.8	1.0		4.2	8.4	**16.5**
H4	Land Governance	0.9	2.5	3.4	4.6	5.5		28.0	56.0	**100.8**
H5	Knowledge Management, Information and Communications	0.9	1.9	1.9	1.9	1.9		24.7	49.4	**82.6**
	TOTAL	**134**	**744**	**814**	**1,071**	**1,103**		**3,926**	**6,349**	**14,141**

3.8 Recommendations for integrating the GSDS Cost Estimates into the National Budget

Recommendations are developed in the following sections for the process of integrating the cost estimates into the national budget.

Guyana's Green State Development Strategy provides a comprehensive set of strategic action lines to guide public investment over the next 20 years. GSDS policies are more strategic than Guyana's past development strategies and reflect a more holistic view of social, economic and environmental well-being, in line with the country's commitments to the United Nations Agenda 2030 and the Sustainable Development Goals (SDGs). The Strategy not only aims to foster sustained economic growth that is low-carbon and climate resilient but a socially cohesive citizenry, good governance and careful management of finite natural resources.

Sound fiscal and monetary policy is one of eight core development objectives under the Strategy and is critical for effective management of the country's natural resource wealth. In the coming years, oil and gas revenues will dominate Guyana's public budget, carrying significant macroeconomic risk. In addition to establishing an operational Natural Resource Fund, the Ministry of Finance is transitioning its planning horizon from annual budgeting estimates to a Medium-term Expenditure Framework (MTEF). MTEFs typically cover a period of three to five years and aim to improve the quality and certainty of multi-annual fiscal planning by combining prescriptive yearly expenditure targets or ceilings with projections of expenditure, revenue and the aggregate fiscal position. The MTEF will detail over what length of time expenditure ceilings are set and how frequently these are revised.

A key requirement for the successful financing, planning and implementation of the Strategy, and its alignment to the new MTEF, is a clear understanding of its cost implications in the short medium-term horizons:

- *Short-term cost implications:* The large majority of policies have cost implications over the short-term, defined as being the MTEF horizon, from 2020 to 2024, and therefore must be consistent and compatible with the incoming MTEF.

- *Medium-term cost implications:* Other policies will have cost implications in the medium-term that will affect regular expenditures and capital investments during the remaining Strategy's horizon (from 2025 to 2039)

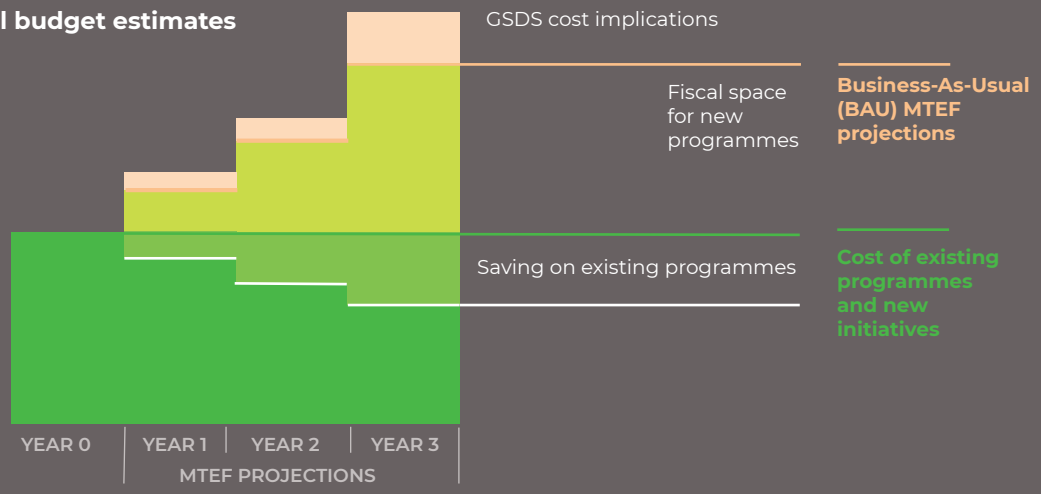
Building the MTEF requires combining Business-as-Usual (BAU) estimates with GSDS short-term cost implications. BAU estimates are built from the budget's base year, incorporating foreseen incremental adjustments on current policies and programmes, such as increase in salaries, exchange rate and inflation adjustments, incremental policy improvements and regular capital and maintenance investments. By contrast, GSDS policies should lead to disruptive interventions and to a fundamental transformation on the scope of public services offered. Therefore, GSDS cost implications are all additional expenditures - added through the implementation of recom-

mended policies, excluding all costs that would be naturally occur if no significant change happened (i.e. the BAU scenario). The combination of BAU projections and GSDS cost implications would lead to the MTEF projections (see Figure 2).

The GSDS cost estimates need to be viewed alongside Budget 2020 figures. As discussed previously, the overall MTEF projections should combine GSDS short-term cost implications with BAU projections, which are outside the scope of this work. The BAU budget projections prepared by line ministries and agencies and coordinated by the Ministry of Finance, should be integrated within MTEF estimates, a process that includes a detailed review for elimination of any double counting. The integrated estimates must then be prioritised and adjusted to GSDS priorities to arrive at the overall expenditure estimates and revenue projections.

FIGURE 2

Integrating GSDS cost implications with "Business-as-Usual" (BAU) Budget projections and into overall MTEF projections



The GSDS cost estimates must be considered a "living body of work". As such, the estimates should be subjected to annual revision, the portfolio of interventions revised and cost estimates refined and adjusted accordingly, incorporating latest information on cost drivers, scale of interventions and Government's development and implementation priorities. In the light of the transition period, GSDS policies and associated cost estimates provide an important platform for planning the development of the country over the next two decades.

CHAPTER 4

MONITORING AND EVALUATION (M&E) FRAMEWORK

CHAPTER 4

MONITORING AND EVALUATION (M&E) FRAMEWORK

4.1 Introduction

The main challenge in Guyana's context is convincing stakeholders about their critical roles in a national monitoring and reporting system. This is not to say that most stakeholders do not appreciate what the M&E is or does, but rather that the challenge is related to how to adjust behaviours and to lock-In M&E procedures in institutions and their staff job routines. The typical approach is to assign a focal point or hire new staff to meet the objective, and until such time, nothing can be advanced. However, monitoring and evaluation practices work when there is an ingrained ethic of evidence-based decision-making embedded within institutions. This is not always the case in Guyana's public institutions.

In many technical workshops conducted during the period of GSDS elaboration (2018) and subsequently, many participants bemoaned the need to develop better structures to facilitate the sharing of data between agencies. However, few identified the steps required for effective data sharing or acknowledged that these begin with each individual and each institution executing the commitment to collaborate and share. Attempts have been made by several environmental institutions to collaborate through memoranda of agreement, however, these have not been demonstrated to be effective tools.

M&E systems require baselines of data that meet standards of verification and reliability, must be agreed upon by stakeholders and diligently followed to ensure the trustworthiness of the data on which the system depends; but success is also tied to responsibility, accountability and execution. Approaches to data collection must therefore be deliberate, disciplined and supervised by leadership. Data collection must be considered everyone's business.

Volume I of the GSDS described the theory of change for transforming Guyana's non-oil sector linked to the vision of the green economy. To accomplish the goals of the green economy i.e. sound management of natural resource wealth, improved resilience in human and produced capital, leadership must first understand and accept the vision in all its dimensions and complexity, then collectively organise, adjust, implement and collaborate to achieve the goals. The GSDS M&E Framework requires institutional leadership and staff to reflect on, adjust and efficiently implement the sectoral and agency strategies and actions to accomplish the larger goal. This also requires an appreciation that a wider pool of actors working towards the common goal is needed for success.

Achievement of green economy goals needs a results-based approach. The latter is grounded in the theory of change and linked to targets and related actions. The results and benefits must be delivered to the identified beneficiaries in timely and measurable ways. Leadership must therefore speak the language of change to their organizations and champion the work required.

The discussion that follows describes the methods used to develop the GSDS M&E Framework and the approach to implementing the policies, including data collection and reporting with partners and in collaboration with key actors.

4.2 Methodology and approach

To support effective and efficient implementation of GSDS policies, a monitoring and evaluation framework with robust targets and indicators is necessary[6]. The framework of targets and indicators is strategic, integrated and aligned to the GSDS' eight (8) development objectives. It also provides the accountability framework for sectors, Ministries, statutory bodies and line agencies during implementation. Without it, investment can be *ad hoc* and with added risks of waste of precious resources. Accountability is a foundational step for building strong institutions, improving the technical capability of staff and for overall governance.

The GSDS M&E Framework is aligned to SDG targets and indicators as it adopts those listed in Guyana's 1st Voluntary National Report (VNR) on SDGs (2019), where relevant. It is sound practice to ensure consistency across various reporting sectors and agencies and to ensure that the country can convey a solid and accurate picture of its development progress and with consistency to its various international agreements and conventions. The M&E Framework provides a useful starting point towards achieving this objective, given its consistency with the VNR. A concerted effort should be applied by all sectors, Ministries and agencies using the M&E Framework to maintain and improve its consistency with continued use over time.

The M&E strategic framework is designed for Cabinet-level monitoring and tracking. Targets are developed in the context of a baseline year (established by its existence), and are set for two time periods: year 2030 - the end of the SDG time frame, which also coincides with the mid-term of the GSDS horizon; and year 2040, the end of the GSDS horizon. The indicators are therefore required to measure the progress of achievement and by the above- stipulated time periods. In the absence of identified baselines, the year 2020 should be used. Sectors should develop and use tactical level indicators that can be aggregated to reflect progress against the defined targets.

The M&E Framework was developed from an interactive process of multi-stakeholder interviews and validation. The design of the M&E Framework was based on insights gleaned from an e-survey, virtual semi-structured interviews, and a literature review. The design process entailed review of GSDS policies, as well as currently active reporting procedures in Guyana. A detailed tactical level matrix of outcomes, indicators, data sources and tar-

gets aligned to GSDS development objectives and policies was initially developed and shared as a starting template with all M&E focal points of budget agencies, and with the assistance of the Ministry of Finance, which hosted the initial meetings during 2019. This matrix (an Excel spreadsheet of indicators accompanies this Volume) was refined based on consultations with stakeholders and a review of similar reports of the policy literature.

A situational analysis was used to assess how M&E processes function across sectors. The strengths and weaknesses of current processes were derived from the interviews and e-survey and were then compared with principles of M&E best practice discerned from the literature and discussed iteratively with stakeholders in order to refine the design. Process, outcome and impact level indicators were evaluated by discussing reporting procedures with M&E focal points and through detailed review of the stakeholder indicator matrix. Inputs to the M&E evolved and were progressively integrated into the framework.

The M&E Framework design architecture is results-based and adopts a value-chain or 'whole-of-government' outlook. The governance structure and flow of information is an important part of the design of the M&E Framework. Figure 3 builds on the recommended GSDS monitoring structure of the "Vision 2040" Council[7]. A resounding message that came from the interviews was the fact that it would be beneficial to have an information management system with an easy-to-use interface to facilitate M&E data acquisition and reporting. This can only be derived from a system that routinely collects and generates data and information that makes M&E possible and credible. Figure 3 illustrates the data value chain, as a flow-through (from left to right) from tactical levels - agencies and institutions - through the lead or main reporting agencies (Ministries or statutory bodies), right up to the decision-makers of the "Vision 2040 Council". There are important feedback loops as represented by the two loops at top of Figure 3 - to continuously verify data quality - and the bottom loop for periodic system review, to ensure that the entire M&E system is operating as designed and producing the required results and outcomes.

FIGURE 3

The GSDS M&E Framework architecture

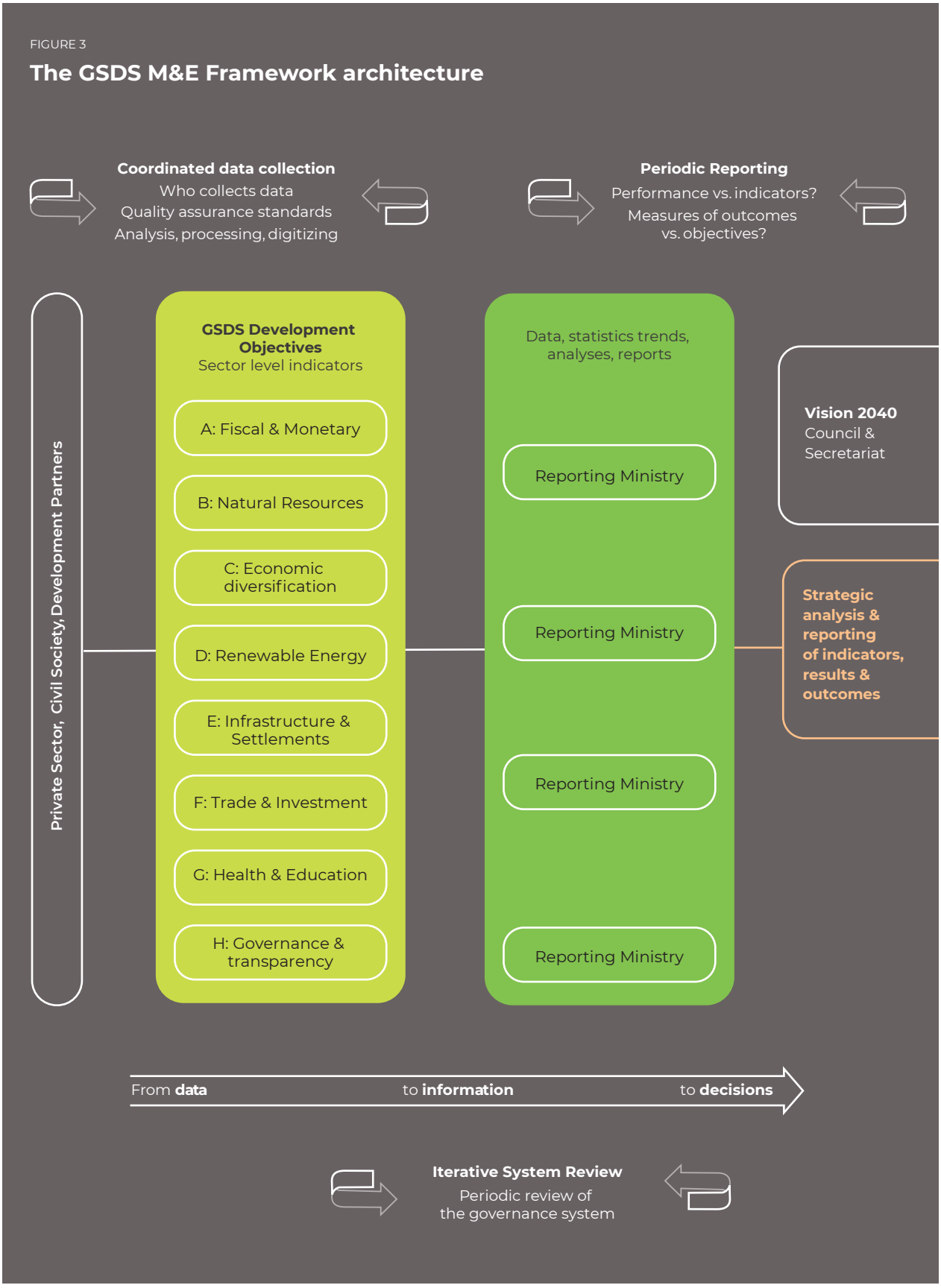
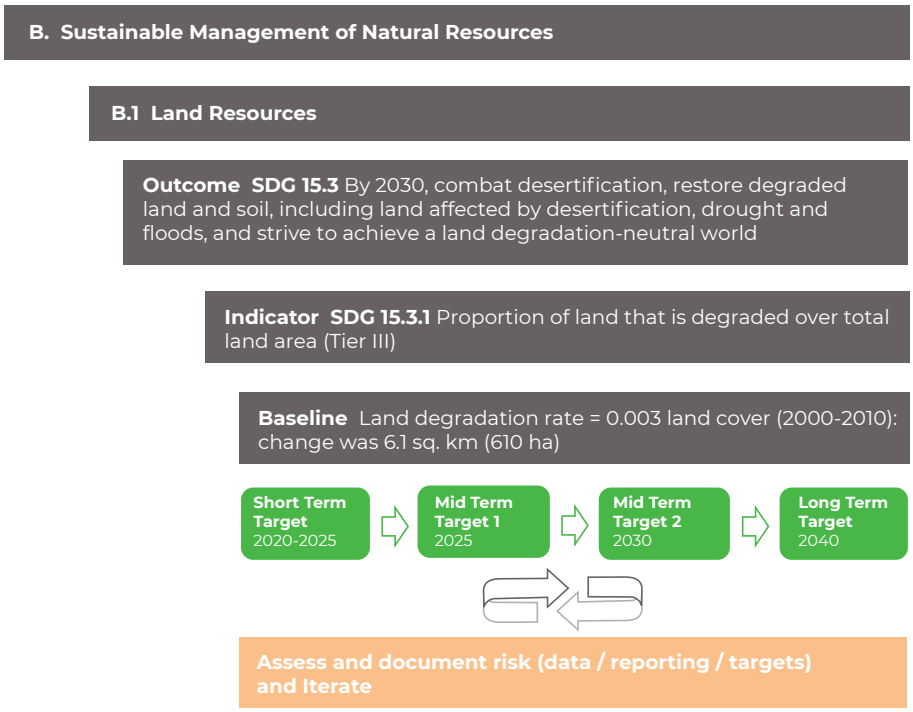


FIGURE 4

Hierarchical nature of the GSDS M&E Framework



The high-level 'strategic dashboard' is developed from extrapolating the key indicators of the tactical level inter-ministerial indicator matrix. The strategic M&E Framework serves as the hierarchical tool to view and periodically review overall performance of GSDS policy implementation across ministries. Figure 4 illustrates the tiered process of indicator reporting and risk assessment that should be employed for each indicator. SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) and CREAM (Clear, Relevant, Economic, Adequate, and Monitorable) must serve as the guiding principles when selecting indicators. The strategic (dark blue shaded bars) and tactical (lighter blue shaded bars) level indicators are defined over short, medium (3-4 year) and long-term timescales. Tactical (or sector) level indicators relate to the short-term targets (lighter green boxes) provided by the reporting budget agencies. The strategic dashboard indicators (darker green boxes) have medium (2030) and long-term targets (2040). This aligns with Guyana's MTEF (as discussed in the previous section) budgeting and planning processes, as well as the longer-term reporting time horizons of the SDGs and the GSDS.

4.3 Conclusions and Recommendations

From the experiences of developing the M&E Framework, it is necessary to make a few conclusions and recommendations:

Evidence-based decision making is the underlying principle of the GSDS M&E Framework. The M&E Framework with supporting database system must be linked to various levels of data that concretely reflect social, environ-

mental and economic components, which can be used by decision-makers. In the same way that the methodology used to develop and validate the Framework was necessarily multi-stakeholder based, so also must be the range and diversity of information and also for local and traditional knowledge. Data should be aggregated at tactical levels and fed up to the strategic or 'dashboard' level to monitor overall progress. The strategic GSDS M&E indicators are therefore intended to be part of a 'dashboard' that gives a snapshot of Guyana's progress on overall development outcomes. Its design adheres to a results-based management approach and indicators must therefore adopt CREAM (Clear, Relevant, Economic, Adequate, and Monitorable) and SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) principles. Leadership is expected to drive this process and be held accountable for its success.

A wide range of individuals and organisations must be involved in feeding data from the tactical to the strategic/dashboard level. It is necessary to improve and at the same time strengthen or build the overall data collection and statistics value chain in Guyana, for all economic sectors, as well as the procedures for engagement of government, private and civil society institutions. This must be compulsory if it is to function seamlessly and provide national statistics that are verifiable (CREAM and SMART) and accessible. Efforts at instituting new procedures and monitoring compliance with data standards should always be well coordinated and inclusive to ensure buy-in and ownership by a wide range of actors. The front-line M&E officers in each agency will be the main sources of data but linkages to networks that include the private sector, NGOs and civil society should be fostered.

As the dashboard and databases grow, so must the innovations to secure its value and continued use. The process by which monitoring and evaluation data are expected to be used in decision making should be transparent and publicly accessible and improved through technology absorption. Interviewees suggested there be a publicly viewable 'dashboard' for progress indicators. Over time and with a consolidated and valid database this will be possible. The value of the M&E Framework needs to be clearly demonstrated. Staff collecting data must be informed as to how these will be used, while the connection between indicator reporting and decision-making needs to be clearly shown. This will reinforce understanding of the value of the M&E Framework to each individual.

Staff must be trained in database management and analytical techniques, some of which must be self-directed. Capacity development is a key strategy for ensuring that staff are equipped to perform their M&E and data collection tasks. However, the responsibility for lifelong learning and familiarization with new techniques is the responsibility of the employee. While data collection, analysis, and reporting skills need to be improved overall in the country, targeted training in these areas can address immediate data gaps and needs. Ministries could appoint at least one dedicated staff person for reporting M&E data, but all staff must be assigned responsibilities and held accountable for producing data and feeding on a timely basis to the M&E coordinator.

4.4 M&E Framework and Strategic (dashboard) indicators

The M&E indicators are detailed for each of the eight GSDS development objectives:

A: Sound Fiscal and Monetary Policy;

B: Sustainable Management of Natural Resources;

C: Green and Inclusive Economic Diversification;

D: Transition to Renewable Energy;

E: Resilient Infrastructure, Green Towns, and Urban Public Spaces;

F: Trade, Investment, and International Cooperation;

G: Healthy, Educated, and Socially Cohesive Population;

H: Good Governance, Transparency, and Knowledge Management.

The tactical level, inter-ministerial (Excel) matrix is complementary to the 'strategic dashboard' as it is formatted by development objective, and identifies associated outcomes and sub-objectives, for which corresponding indicators have been formulated. For each indicator additional qualifying parameters are specified e.g. reporting agencies, the requisite baseline year and value, 2030 and 2040 targets and a recommended frequency of reporting. The tactical indicators serve as the comprehensive basis for aggregating the performance measures and evaluating overall progress on the development objectives. The target values and baselines were, for the most part, provided by the responsible agencies. In places where data were not provided or available, suggestions were made for use of SDG indicators and targets (VNR, 2019) or of specific proxy indicators e.g. the World Bank's *Ease of Doing Business Index*. The clear message is that the M&E Framework will be perfected over time with consistent use and continuous refinement of aggregated databases emerging from the tactical matrix.

A reporting form has been developed to facilitate data submission. The form (see Annex I) for reporting on indicators clearly outlines what data are needed and provides short descriptions for each indicator. It is developed to provide transparency and assurance of data validity within the M&E value chain system (Figure 3). M&E officers from the relevant agencies will be responsible for disseminating and tracking use and accuracy of the form in the data collection process. The consistent use of quality assurance protocols must be a routine practice for all data collected and used for indicators reporting.

The GSDS M&E Framework will require ongoing maintenance and systemic review. A key approach will be to ensure that sufficient financial and capable human resources are in place. The team of the proposed "Vision 2040" Secretariat with an inter-ministerial coordinating role, will manage the process

of interfacing with designated contacts in each of the government ministries. Additional knowledge and information resources are summarized in Annex II.

Ongoing evaluation of the M&E Framework is iterative and must foster continuous learning. A rapid appraisal is useful for these tasks, and should use any or of five key methods, (a) key informant interviews; (b) focus group interviews; (c) community interviews; (d) direct observations; and (e) surveys[8]. Interviews and focus groups may be useful for 'spot checking' the performance of the M&E Framework on an intermittent basis. Focus groups in particular can be very helpful in addressing concerns in certain areas of GSDS implementation such as within a particular policy domain or governmental ministry. Direct observations are suggested on a periodic basis (annual). The annual reviews of the Framework should be based on diagnostic indicators or 'KPI's (Key Performance Indicators) which can be used to benchmark the efficacy of the M&E system. An example is provided In Table 5.

TABLE 5

A sample of KPIs for M&E system review

KPI (Key Performance Indicator)	Description	Measure
Indicators Coverage	Is there a sufficient number of indicators? Are there too many indicators?	Ranking 1 to 5 (low to high)
Data Availability	Is data adequately available for indicators?	
Data Quality	Is data of high quality?	
System Complexity	Is the framework too complex?	
Stakeholder engagement	Are stakeholders using the system?	
Stakeholder capacity	Do stakeholders (particularly M&E officers in various agencies) have enough capacity to effectively report on indicators?	
Framework efficacy	Is the M&E Framework enabling effective monitoring of progress on GSDS Development Objectives.	

The significant amount of data gathered from different agencies throughout the implementation of the GSDS M&E Framework must be secured and safely stored in a centralized data repository. Several stakeholders agreed with the benefits provided by a central data storage repository, such that users could query and view indicator-related data sets. Such a repository would indeed be useful for reporting on the SDGs, the Paris Agreement, the Multilateral Environmental Agreements and other international conventions to which Guyana is obligated to report. The two obvious statutory institutions are the Bureau of Statistics, which has the mandate for compiling national statistics and conducting census and household surveys; and the National Data Management Authority, which has the mandate for centralizing the digitized databases of the public sector and for setting up e-government services.

Table 6 below, lists the strategic 'dashboard' of indicators that are recommended for tracking the progress made on the eight GSDS development objectives. It is also important to pay attention to the Table footnotes that explain development, selection and use of the recommended indicators.

TABLE 6

GSDS Strategic Indicators and targets

NATIONAL OBJECTIVE: (A) Sound Fiscal and Monetary Policy					
Development sub-objectives	**Outcome**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
A1. Sound Fiscal Policy	Revenues from Guyana's natural resource wealth (petroleum, mining, forestry resource) are transparently governed and managed Oil wealth is channeled into productive public investments to deliver sustainable development benefits for the whole of society and into the future	A.1. Ratio of funds invested to total natural resource fund deposits	0	50%	90%
		A.2. Audited annual Reports of the Natural Resource Fund's governing Committees are publicly available	0	10	20
		Annual audited reports on Natural Resources Fund investment performance available publicly	0	10	20
A2. Monetary Policy	Stable macroeconomic conditions and confidence in business and investment environment	A.3. Annual non-oil GDP growth rate[9]	4.1% (2018) 4.8% (2020)	5.6%	3.9%
		A.4. Inflation[10]	1.6% (2018) 2% (2020)	<2%	<2%
		A.5. Improvement in World Bank Ease of Doing Business index[11]	55.5 (2019)	58	60.5

NATIONAL OBJECTIVE: (B) Sustainable Management of Natural Resources					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
Guyana preserves its natural capital through prudent management of its natural resources	SDG 15.1 By 2030, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	B.1 Percentage of protected area by total land area[12]	8% (2019)	12%	17%
		B.2 The number of Ministries that have incorporated natural capital accounting in their management practices[13]	0 (2020)	5	10
B1. Land Resources	SDG: 15.3 By 2030, combat desertification, restore degraded land and soil including land affected by desertification, drought, and floods, and strive to achieve a land degradation-neutral world	B.3 Proportion of forest land that is degraded over total forest land area	0.00019 (2017)	0	0
		B.4 Land degradation rate	0.003 (2019)	0	0
B2. Water Resources	SDG: 6.1 By 2030, Achieve universal and equitable access to safe and affordable water for all	B.5 Proportion of population using safely managed drinking water service[14]	95% (2020)	99%	99%
	6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	B.6 Integrated water resources management implemented.[15]	No (2020)	partial	Yes
B3. Forest Resources	SDG: 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests combat desertification, and halt and reverse land degradation and halt biodiversity loss	B.7 Forest area as a proportion of total land area	87% (2018)	87%	87%
		B.8 Progress towards sustainable forest management[16]	TBA[17]	50%	100%
		B.9 Percentage of data used in the REDD+ MRV (monitoring reporting and verification) program that has been verified through ground-truthing[18].	TBA[19]	75%	100%
		B.10 Percentage of forest licenses that utilize advanced technology in: • Resource quantification • Ecosystem monitoring • Resource harvesting	TBA[20]	75%	100%

NATIONAL OBJECTIVE: (B) Sustainable Management of Natural Resources					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
B4. Biodiversity and Ecosystem Services	15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	B.11 Progress towards national targets established in accordance with CBD Aichi Target 2 of the Strategic Plan for Biodiversity 2011–2020/2050.[21] B.12 The number of Ministries that have been incorporated biodiversity and ecosystems actions into their annual plans.[22]	TBA[23] TBA[24]	50% 60%	100% 100%
	15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities	B.13 Proportion of traded wildlife that was poached or illicitly trafficked[25]	0 (2020)	0	0
B5. Precious Metals, Minerals, and Aggregate Resources	Greener and safer operating practices, minimising waste and negative environmental and social impacts with high productivity and sustainability through the use of advanced technology	B.14 Percentage of mining companies that are operating with an approved environmental management plan[26] B.15 Avoided GHG Emissions (tonnes of CO_2e by 2030) by mining sector	0 (2020) TBA	30% TBA	70% TBA
B6. Traditional knowledge and practices	Preserving traditions and practices for community and long-term survival	B.16 Land Tenure in indigenous communities B.17 Documentation of indigenous traditions and practices	TBA TBA	TBA TBA	TBA TBA

NATIONAL OBJECTIVE: (C) Green and Inclusive Economic Diversification / Support Economic Resilience					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
Green and Inclusive Economic Diversification	SDG 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value-added and labour-intensive sectors[27]	Trends of GHG emissions reduction (&/or avoided GHG emissions per key sector):[28] C.1. Energy emissions (transport) (Gg CO_2)/ avoided GHG emissions, tones of CO2e C.2. Energy industry (Gg CO_2) C.3. Agriculture, Forestry, Fishing and Land Use (Gg CO_2)/avoided GHG emissions, tonnes of CO2e: - Sustainable Forest Management - Sustainable Crop Management - Sustainable Livestock/ Grazing Land Management - Mangrove (and peatlands) conservation - Manufacturing - Energy	(2004) 314 741 325 TBA	TBA[29] TBA TBA TBA	TBA TBA TBA TBA
C1. Resource Extraction for Sustainable Development	Greener and safer practices adopted at the Businesses and sector level	C.4. Number of firms that have adopted an environmental management system or green practices/code of conduct[30]	TBA	TBA	TBA
C2. Sustainable, Productive, and climate-resilient Agriculture and value-added production **C3. Green, Inclusive and High value-adding Service Industries** **C4. Strengthening the Business Environment**	Ensure a high level of competitiveness and resilience of the economy	C.5. Improvement in Guyana's ranking in the World Economic Forum's Global Competitiveness Report[31]	3.56 / 100 (2018)	8 / 100	10/100
		C.6. Percentage of exports which are non-primary non-oil exports. Exclude – non processed agriculture, gold, oil, timber.[32]	5% (2020)	12%	20%

NATIONAL OBJECTIVE: (D) Transition to Renewable Energy					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
D1. Renewable and clean energy **D2. Renewable and Clean Energy Use in the Power Sector**	7.1 By 2030, ensure universal access to affordable, reliable, and modern energy services SDG 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	D.1. Proportion of population with access to electricity D.2. Renewable energy as a proportion of total installed capacity D.3. Renewable energy share in the total final energy consumption	90.9 (2017) 16.6 (2016) 15% (2015)	100% 60% 30%	100% Near 100% Near 100%
D3. Energy Efficiency	SDG 7.3 By 2030, double the global rate of improvement in energy efficiency	D.4. Percent of industry adopting verifiable energy efficiency practices[33].	TBA	TBA	TBA
D4. Sustainable Transport Sector		D.5. Rate of penetration in use of sustainable fuels as percentage of all registered vehicles[34] D.6. Rate of penetration in use of electrical vehicles as percentage of all registered vehicles[35]	0% (2015) 0%	1.5% 1.5%	3% 3%

NATIONAL OBJECTIVE: (E) Resilient Infrastructure, Green Towns, and Urban Public Spaces					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
E1. Land Transport	Development of a network of 1,000 km of new roads across Guyana that use and apply low carbon, green economy (e.g. recycled) materials and methods in design and construction to improve resilience and user safety and to reduce travel time between coastal and hinterland areas	E.1 Proportion of new roads constructed[36] E.2 Proportion of roads applying low emission/green economy designs, materials &/ or construction methods[37] E.3 Percent reduction in travel time between the coast and hinterland (e.g. 15% less time per trip)[38]	0 0 0	40% 50% 20%	80% 100% 30%
	Improved vehicular and passenger safety on public roads	E.4 Year-on-year percent reduction in traffic accidents, injuries and or deaths by road users[39].	1,580 (2016)	10%	20%
E2. Ports	Maritime transport and port operations are increasingly low carbon	E.5 Number of maritime transportation / port operation services adopting low carbon measures[40]	0 (2020)	20	40
E3. Airports	Guyana's domestic and international airports and air transportation services are increasingly low carbon	E.6 Number of international / domestic airports adopting low carbon measures.[41]	0 (2020)	20	40
E4. Information and Communications Technologies *(See also section H5)*	Increase broadband coverage and bandwidth nationwide	E.7 Extent and coverage of broadband network	TBA Km	TBA	TBA
E5. Coastal Protection Infrastructure	Improved resilience of coastal protection systems[42]	E.8 Length of coastlines protected (km)	TBA[43]	TBA	TBA
		E.9 Length of coastline protection using nature-based solutions (km)	TBA[44] (2020)	25%	50%
E6. Inclusive and Green Towns and Urban Settlements	SDG 11.3 enhance inclusive and sustainable urbanization and capacity for participatory, integrated, and sustainable human settlement planning and management[45]	E.10 Percentage of regional towns applying/utilizing green designs, low emission or climate resilient plans[46]	5% (2020)	50%	100%
Urban Transport	Support low-carbon and sustainable lifestyles through the provision of convenient and low-cost alternatives to private transport as well as improving access to non-motorized transport	E.11 No. of Alternative Fuel Vehicles used in public transportation service[47]	0 (2020)	20%	40%

NATIONAL OBJECTIVE: (F) Trade, Investment and International Cooperation					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
F1. Advance action on existing trade agreements **F2. Implement Supporting Standards** **F3. Promote and Support 'Green' Goods**	The enabling conditions for trading and investing in green goods and services are in place	Increased trade in green goods and services via main Trade Agreements F.1. Number of active trade agreements. F.2. Total value of trade covered by a trade agreement F.3. % of value of trade in non-oil sectors (mining, timber, agriculture) that adopt certified green practices	 TBA TBA TBA	 TBA TBA TBA	 TBA TBA TBA

NATIONAL OBJECTIVE: (G) Healthy, Educated and Socially Cohesive Population					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
G1. Public Health and Well Being	Poverty reduction, adequate social safety net and improved public health and education outcomes	G.1 Reduction in (incidence) of communicable diseases	(2016)		
		(a) HIV/AIDS,	180[50]	20%	139[51]
		(b) Tuberculosis,	77	20%	27
		(c) Malaria	130	20%	140
		(d) Neo-tropical diseases	TBA	TBA	TBA
		G.2. Reduction in incidence of non-communicable diseases	14	20%	40%
		G.3. Percent of population in Guyana living in conditions consistent with moderate poverty[48]	(2006) 36.1%	TBA	TBA
		G.4. Proportion of seats held by women in national parliament and local government	(2018) 38%	50%	50%
		G.5. Gini Index for economic inequality[49]	(2018) 83.8	79.61	75.61
	Quality in delivery of health services	G.6. Quality measures ranking across seven health system components. See WHO approach[52]:			
		(a) Measure of aspects of care that go beyond technical quality, e.g. responsiveness, acceptability and trust.	TBA	TBA	TBA
		(b) Measure perceived quality and compare with clinical quality	TBA	TBA	TBA
		(c) Measure quality at different points in the patient pathway through the health system	TBA	TBA	TBA
		(d) Measure the immediate and upstream drivers of quality care	TBA	TBA	TBA
		(e) Measure collective and individually assessed quality and its relationship to power, social norms, trust and values	TBA	TBA	TBA

NATIONAL OBJECTIVE: (G) Healthy, Educated and Socially Cohesive Population					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
G2. Education	Significant improvement in secondary school matriculation Ensure inclusive, equitable and quality education that promotes lifelong learning and opportunities for all	G.7. Percentage of pupils -M/F- who: (a) in Grades 2/4 who attained literacy standards when tested (b) at the end of primary; (c) at the end of lower secondary - achieving at least a minimum proficiency level in (i) reading and (ii) mathematics. G.8. Participation rate in organized licensed learning in each daycare centre by sex[53] G.9. Participation rate of youth and adults in formal and non-formal education and training[54]	1% (2018) 4% (2018) TBA TBA TBA (2018) 19%	20% 20% TBA TBA TBA TBA	50% 50% TBA TBA TBA TBA
	Ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education. Prioritize investment in special needs children	G.10. Parity indices Disparities in education outcomes between coastal and hinterland regions have been significantly reduced. (rate of enrolment per cohort per region per cohort) G.11. Hinterland matriculation rate divided by coastal matriculation rate[55]	0.50 (2018)	1.03	1.03
		G.12. Participation rate in organized learning (one year before the official primary entrance age), by sex.	TBA	TBA	TBA
	Strengthen Technical, Vocational Education and Training (TVET) strengthened to play a vital role in preparing students for the labour market	G.13. Percentage of graduates from secondary and TVET who have been absorbed into the workforce, based on prior 12 months[56]	TBA	TBA	TBA
	G2.1 Redouble efforts to keep boys and girls in school during the compulsory period of schooling	G.14. Percentage of youth (15-24) and adults (15+) (m/f) that achieve literacy and numeracy	TBA	TBA	TBA

NATIONAL OBJECTIVE: (G) Healthy, Educated and Socially Cohesive Population					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
	G2.10, G2.16 Protect the health of schools by ensuring water, sanitation and hygiene facilities are in line with minimum international health standards. Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)	G.15. Composite index of education facilities in above average/average condition[57] *Composite index factors:* Proportion/% of schools with access to (as per the WASH indicator definitions): a) electricity; b) the Internet for pedagogical purposes; c) computers for pedagogical purposes; d) adapted infrastructure and materials for students with disabilities; e) basic drinking water; f) single-sex basic sanitation facilities; and g) basic hand-washing facilities Composite Index of condition of education facilities	62 TBA	TBA TBA	100 TBA
	G2.3, G2.4, G2.5 & G2.7 New teacher training institutions must be accredited to national (and international) standards. By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.	G.16. Percentage of teachers meeting professional qualifications and training at all levels of the education system Proportion of teachers (M/F) in the education system meeting minimum qualification requirements for: (a) pre-primary; (b) primary; (c) lower secondary; (d) upper secondary education levels; and (e) pre-service or in-service requirements	73% (2018)	80%	90%

NATIONAL OBJECTIVE: (G) Healthy, Educated and Socially Cohesive Population					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
	SDG 8.3: achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	G.17. Total woman who are economically actively / total woman. Vs. Total men economically active / total men. Should be much lower than women for men.	TBA	TBA	TBA
		G.18. Proportion of the economic active population as a percentage of total population.	TBA	TBA	TBA
		Youth unemployment (18 yrs to 24 yrs).	TBA	TBA	TBA
Employment	SDG 8.3: achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	G.19. Number of persons/small businesses transitioning from 'informal' to 'formal' sector (goal is to reduce the size of the 'informal economy')	TBA	TBA	TBA

NATIONAL OBJECTIVE: (H) Good Governance, Transparency and Knowledge Management					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
H1. Governance and Citizen Participation	Guyana's government is working effectively. H1.1 Improve performance and accountability of public administration and services.	H.1 Governance – decision-making procedures[58]. Percentile rank for '*Government Effectiveness*'	42 (2008)	48	50
		H.2 Transparency – information on decision-making available publicly[59]	3.7 (2008)	4.2	5.5
		H.3 Performance: institutions performing according to mandate, customer satisfaction[60] Percentile rank for '*Regulatory Quality*'	32 (2008)	34	36
H2. Rule of Law and Strong Institutions	H2.2 Strengthen the independent Judiciary with additional resources for greater effectiveness.	H.4 Use UN Rule of Law Indicators for Independence and Integrity of the Judiciary[61] – Judges – Survey of population: "do you think that judges are able to make decisions without direct or indirect interference by Government or politicians?" Results: Always able (4); Sometimes able (3); Rarely able (2) never able; (1). (Survey every 5 years)	0	2	4

NATIONAL OBJECTIVE: (H) Good Governance, Transparency and Knowledge Management					
Development sub-objectives	**Outcomes**	**Indicator(s)**	**Baseline**	**Targets**	
				SDG 2030	**GSDS 2040**
H3. Decentralization and Local Governance	Public administration is effectively decentralized through increased local government capacity and efficiency H3.2 Promote greater autonomy in the regional system to support the efficiency, effectiveness and growth of services within green towns	H.5 # of New Local Democratic Organs and Capital Towns established (#municipalities, # Neighbourhood Democratic Councils	5 municipalities 65 Neighbourhood Democratic Councils (NDCs)	12 municipalities TBA	TBA TBA
H4. Land Governance	Improved land and natural resource governance and administration supports more effective and equitable land use planning and development H4.4 Prioritise strategic investments to improve land administration	H.6 Adoption of the National Land Policy H.7 Development of a National Physical Development Plan	0 0	1 1	1 1
Land Rights of Indigenous Peoples	H4.5 Resolve the land rights of indigenous peoples. Follow work of the UNDP Amerindian Land title project[62]	H.8 Number of Amerindian Communities with land titles H.9 Number of negotiated land use claims approved for Amerindian groups	TBA TBA	TBA TBA	TBA TBA
Extractive Resources	H4.7 Better oversight and control of mining operations is a priority. H4.8 Promote transparency in Oil and Gas sector.	H.10 A document outlining the criteria developed and in place for better and improved health, safety, and environment practices for all mining operators is in place and operational by 2030. H.11 Strategic development plan for the oil and gas sector outlining the transition to an optimal mix of renewable and clean energy.	0 0	1 1	1 1
H5. Knowledge Management, Information and Communications Technologies *(See also Section E4)*	SDG 9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020. See development Objective H. Access to broadband services has significantly improved particularly in hinterland areas	H.12 Percentage (%) of households in the hinterland that have access to broadband internet services	TBA	TBA	TBA
	e-Government	H.13 Number of government services available online	TBA	TBA	TBA

INDICATOR METADATA REPORTING FORM

GSDS M&E Indicator Metadata Information			
Name of Indicator	Exact name of the indicator		
(State the name of the indicator)			
Indicator Description	Indicator description		
Definition	What is purpose and what are the key elements?		
(State the purpose for which the indicator is used and define the key terms in the name of the indicator)			
GSDS Development Objective	GSDS Development Objective (A through H)		
Formula	How is it calculated, including units of measure?		
(Specify how the indicator is to be calculated)			
Frequency of Reporting	eg. Annually		
(Specify how often the indicator is to be calculated and reported)			
Indicator Characteristics			
Agency(s) Responsible for Reporting	Names of agency(s)		
Reporting Officer	Full Name of Reporting Officer(s)		
Methods used to calculate this indicator			
Data collection	Who	Does what	How (methods)
(Specify all who are responsible for collecting the data on the indicator)	e.g. GFC	e.g. Carry-out Forest Survey	e.g. Calculating species richness and species evenness across Guyana's forested areas.
	Add another actor		
Data transmission and validation	Who	Does what	How (methods)

(Specify all who are responsible for sharing and verifying the data on the indicator)	e.g. GFC/ Independent Verifier	e.g. Review the data collected	e.g. Expert Analysis
	Add another actor		
Data processing and results analysis	Who	Does what	How (methods)
(Specify all who are responsible for processing and analysing the data)	e.g. GFC	e.g. Compile the data collected and draft a report.	e.g. Utilizing graphs, charts and tables to illustrate species evenness and species diversity at the respective locations.
	Add another actor		
Dissemination of analysis results	Who	Does what	How (methods)
(Specify all who are responsible for communicating and reporting on the indicator)	e.g. GFC	e.g. Identify the relevant stakeholders and distribute the report accordingly.	e.g. Mapping the influence and importance of the stakeholders and determining the appropriate medium of distribution.
	Add another actor		
Indicator Values			
DATE:	ENTER VALUE	ENTER UNITS	
DATE:	ENTER VALUE	ENTER UNITS	
DATE:	ENTER VALUE	ENTER UNITS	
DATE:	ENTER VALUE	ENTER UNITS	

ANNOTATED BIBLIOGRAPHY OF MONITORING AND EVALUATION (M&E) BEST PRACTICES

Bamberger, M., Rao, V., and Woolcock, M. (2010). *Using Mixed Methods in Monitoring and Evaluation: Experiences from International Development*. Policy Research Working Paper No. 5245. The World Bank Poverty and Inequality Team, Development Research Group. p.31.

Bamberger *et al.* provide an overview of using mixed qualitative and quantitative methods in M&E development projects. They emphasize the importance of a mixed method approach, and the role of qualitative data to provide context and enhanced understanding of quantitative data.

Global Environmental Facility (GEF). (2010). *The GEF Monitoring and Evaluation Policy.* Evaluation Document No. 4. November, 2010. p.42. GEF Evaluation Office. Washington, DC.

The GEF is a partnership involving 176 member countries, 10 agencies, recipient countries, NGO's, and the private sector. In their document, the GEF presents an overview of the role M&E plays in their organization, the structure of the GEF, and the M&E criteria and minimum requirements. The GEF focuses on results-based management. Their M&E system is guided by the Evaluation Cooperation Group (ECG) and the United Nations Evaluation Group (UNEG).

International Federation of Red Cross and Red Crescent Societies (IFRC). (2011). *Project/Programme Monitoring and Evaluation (M&E) Guide*. Planning and Evaluation Department of the IFRC Secretariat. p.132. Geneva, Switzerland.

The IFRC presents an M&E implementation guidebook intended for staff and people managing projects/programmes at the country-level in National Red Cross and Red Crescent Societies. The guidebook is broken into two parts. The first part addresses M&E concepts and considerations (e.g. results-based management, M&E standards and ethics, attention to gender and vulnerable groups, how to minimize bias, etc.). The second part presents a 6-step implementation guide. An extensive list of tools, resources, templates, and examples are provided in the Annex.

International Union for Conservation of Nature (IUCN). (2015). *The IUCN Monitoring and Evaluation Policy*. IUCN. April, 2015. p.12. Gland, Switzerland.

The IUCN M&E policy is intended to provide common structure and standards across the IUCN Secretariat, and sets out minimum M&E requirements and

principles. The IUCN follows a results-based management system. Monitoring criteria follow the SMART principle. Evaluation criteria includes: relevance; effectiveness; efficiency; impact; and, sustainability.

Kusak, J.Z. and Rist, R.C. (2004). Ten Steps to a Results-Based Monitoring and Evaluation System: A Handbook for Development Practitioners. The World Bank. p.268. Washington, D.C., USA.

Kusak and Rist present comprehensive 10 steps to building a results-based monitoring and evaluation system targeted towards "officials who are faced with the challenge of managing for results". Kusak and Rist recommend pairing the handbook with the World Bank workshop document "Designing and Building a Results-Based Monitoring and Evaluation System: A Tool for Public Sector Management". Although presented as linear, the authors go on to emphasize that steps will likely be re-visited or worked on several simultaneously. Extensive guidance on how to carry out each step is provided and expanded on using case studies and example scenarios.

Kusters, K., Buck, L., de Graaf, M., Minang, P., van Oosten, C., Zagt, R. (2018). Participatory Planning, Monitoring and Evaluation of MultiStakeholder Platforms in Integrated Landscape Initiatives. *Environmental Management. 62*. P.170-181.

Kusters *et al*. present a participatory method to aid planning and M&E of integrated landscape initiatives (ILI) that generally include a multi-stakeholder platform. Methodologies used to develop the method include a literature review, peer consultation, and two pilot workshops. The participatory method is comprised of three themes: look ahead (what are the priorities for collaboration in the future?); look inward (quality of the multi-stakeholder process within the platform); and, look back (has the platform met its objectives?). The method provides relatively simple tools as a structure to complex, multi-stakeholder workshops.

Masuku, N.W.K. (2015). *A global overview of Monitoring and Evaluation (M&E) and its meaning in the local government context of South Africa*. Africa's Public Service Delivery & Performance Review (APSDPR), *3*(2). a79. p.21.

Through secondary data and case study review, Masuku sourced international best practices in M&E and assesses how they may be designed and implemented in local rural municipalities in Africa. The author emphasizes the importance of indigenous knowledge and consultation to promote stakeholder participation and adoption of an M&E system. A Participatory Monitoring and Evaluation (PM&E) approach at a municipal level is recommended to compliment the Result-Based M&E operating at the strategic level.

Mills-Knapp, S. and Scott, O. (2019). *Best Practices in Monitoring and Evaluation of Urban Climate Adaptation: A literature review.* Prepared by: Chemonics International Inc. April 2019. p.49. Prepared For: United States Agency for International Development (USAID) Adaptation Thought Leadership and Assessments (ATLAS). Washington, DC, USA.

Mills-Knapp and Scott present a literature review of good practices and standards in design of municipal-level adaptation M&E frameworks. The overview is intended for adaptation practitioners, the development community, and the general climate adaptation M&E field. Key messages and best practices for designing a framework, implementation, and ensuring success are presented.

Porter, S. and Hawkins, P. (2019). Achieving sustainability through sustainable organizational evaluation systems. In G. Julnes (Ed.), *Evaluating Sustainability: Evaluative Support for Management Processes in the Public Interest. New Directions for Evaluation. No. 162.* p.87-101.

Pulling from literature and experience, Porter and Hawkins (2019) assert that only sustainable evaluation systems capable of supporting sustainable development must be: networked (facilitate coordinating, cooperating, and collaborative information exchange), use-focused (products and processes are useful), and undertake processes aligned with agreed-upon quality standards (value placed on transparency, capacity development, management and accountability).

Rugg, D. (2016). The role of evaluation at the UN and in the new Sustainable Development Goals: Towards the Future We Want. *Global Policy*. 7(3). p.426-430.

Rugg presents an overview of how evaluation was considered in the 2015 international policy debates and the role of evaluation on implementing the Sustainable Development Goals in the 2030 Agenda for Sustainable Development. They highlight the importance of evaluation, collaboration, and adoption of a nationally relevant SDG M&E framework based on stakeholder input using local data where possible.

The World Bank. (2004). *Monitoring and Evaluation: Some Tools, Methods, and Approaches*. The World Bank. p.26 Washington, DC, USA.

An overview of M&E tools, methods, and approaches, as well as their purpose, use, advantages/ disadvantages, costs, skill, and time required are presented in this handbook. Detailed guidance is presented on the following: performance indicators; the logical framework approach (results chain); Theory-Based evaluation; formal surveys; rapid appraisal methods (key information interview, focus group discussion, community group interview, direct observation, and mini-survey); participatory methods (stakeholder analysis, participatory rural appraisal, beneficiary assessment, participatory M&E); public expenditure tracking surveys (PETS) track the flow of public funds; cost-benefit (measures both inputs and outputs in monetary terms); cost effectiveness (estimates inputs in monetary terms and outcomes in non-monetary quantitative terms); analysis (inform decisions about efficient allocation of resources); and, impact evaluation (systematic identification of the effects).

United Nations Office on Drug and Crime (UNODC). (2018). *Handbook: Results-based Management and the 2030 Agenda for Sustainable Development.* UNODC. p.78. Vienna, Italy.

The UNODC presents a results-based management best practices handbook prepared for staff to serve as a succinct resource to establish a common approach to programme planning, monitoring and reporting. The context of the handbook is written within the overall framework of the 2030 Agenda for Sustainable Development. The handbook includes templates, examples, and step-by-step guides to RBM M&E in the annexes.

United Nations Development Program (UNDP). (2009). *Handbook on Planning, Monitoring, and Evaluating for Development Results*. UNDP. p.232. New York, NY, USA.

The UNDP handbook presents a results-based framework for programme design, monitoring, and evaluation, and is intended for UNDP staff and associated partners. Planning, monitoring, and evaluation principles, step-by-step guides, tools, references, and templates are provided.

Wisniewski, J.M., Yeager, V.A., Diana, M.L., and Hotchkiss, D.R. (2016). Exploring the barriers to rigorous monitoring and evaluation of health systems strengthening activities: qualitative evidence from international development partners. *The International Journal of Health Planning and Management. 31*. p.E302-E211.

Wisniewski *et al*. identify a lack of robust evaluation systems for government health system strengthening (HSS) programs. The objective of their study was to identify knowledge gaps and challenges that impede a rigorous M&E of HSS programs. Methodologies include a mix of purposive and snowball sampling and were limited to semi-structured interviews with 8 USAID country missions, and 6 non-mission experts based in multiple continents. Identified challenges include indicators (not enough or too many); data (low quality or unavailable technology); demonstrating attribution (difficult to attribute results of a program to a complex, interrelated health systems); funding and resources (programming is prioritized over evaluation and lack adequate timing allocation). The authors recommend fostering consensus and collaboration between organizations and governments to standardize indicators; streamline data collection; train staff and disseminate information.

ENDNOTES

1 Constitution 1980, as amended, the Specific Rules of Part 2, Title 1: "Protection of the Fundamental Rights of the Individual" sets out in sections 138-153, the list of rights, protections and freedoms, which include provisions against race discrimination, equality of status and for indigenous people and women, among others.

2 A dynamic Excel tool with detailed spreadsheets that provide all cost tables highlighted herein, including the formulae and references used to estimate the costs of GSDS policies, is provided separately from this narrative report.

3 Thematic/ organizational subdivisions of budget agencies, such as "Primary Education" under the Ministry of Education.

4 Entities that have a separate organization and a degree of autonomy in relation to line ministries, such as the Guyana Forestry Commission or the Guyana Revenue Authority.

5 It is important to notice that the policies that are expected to have minimal budget impacts (i.e. fall under 'business-as-usual' (BAU) spending) are not costed.

6 This section should be read in conjunction with section 5.2 "Implementation" of the GSDS Volume I: Policy Recommendations, Financial Mechanism & Implementation.

7 See chapter 5 of GSDS Volume I.

8 Reference: Kumar, K. ed. (1993). Rapid Appraisal Methods. World Bank. Washington, D.C.

9 Non-Oil real GDP growth rate projections are derived from the Sept 2019 IMF country report on Guyana 19/296 (https://www.imf.org/en/Publications/CR/Issues/2019/09/16/Guyana-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-48678). The targets would be preferentially established by the Ministry of Finance. 2018 and 2019 figures are derived from the IMF report. The 2030 and 2040 targets of 5.6% and 3.9% respectively come from: Guyana - Green Economic Modelling: A study to inform the Green State Development Strategy: Vision 2040 Final Technical Report & Synthesis Report, as provided by Ministry of Finance.

10 Inflation rate is a target rate set preferentially by the Ministry of Finance. Hence these targets are merely indicative.

11 The World Bank's Ease of Doing Business score measures an economy's performance with respect to a measure of regulatory best practice across the entire sample of 41 indicators for 10 Doing Business topics and is used as a proxy indicator for progress on monetary policy in the absence of appropriate national targets. For each country the index is calculated based on a normalized factor of regulatory performance for each of the 41 indicators. The Ease of Doing Business score is calculated by averaging the individual indicator scores for each category and then averaging across the categories. The indicator categories used are: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. More information can be found here: https://data.worldbank.org/indicator/IC.BUS.EASE.XQ?end=2019&locations=GY-TT&start=2019&view=bar. A target level for Guyana for Vision 2040 was established as a proxy in the absence of an appropriate national measure. The target is based on the 2019 score of the Commonwealth of Dominica (60.5) as the lowest score achieved by a CARICOM country in the report year.

12 Land area is derived from the UNCCD ACP Report (Country Profile Section). The protected areas data comes from the PAC (Protected Areas Commission) as shown in the National Biodiversity Report to the UNCBD. Targets for 2030 and 2040 are estimates based on a review of the aforementioned reports.

13 The number of government agencies who have incorporated natural capital into fiscal planning. Specifically, this means that natural capital (natural systems) has been identified and incorporated into financial management of the operation. Standard practices for Natural Capital assessment should be used (https://naturalcapitalcoalition.org/natural-capital-2/) . The TEEB Framework (http://www.teebweb.org) is another methodology for assigning economic values to nature.

14 Reference: Sources meeting or exceeding WHO Guidelines for Drinking water quality.

15 The VNR states that Guyana has an Integrated Water Use Policy in draft form. This has the implications for forming at National Water Council (NWC) which represents a wide range of stakeholders. The indicator for this is whether or not this policy has been implemented.

16 Percentage of forest licenses under a sustainable forest management plan as per GFC Code of Practice.

17 GFC to establish the current – baseline – figures as to how many forest licenses are currently deemed 'sustainable'.

18 MRV (Monitoring Reporting and Verification) is a critical part of the REDD+ program. Technology can help to advance MRV activities making them more efficient and effective. This indicator is a measure of the degree to which technology (to be defined) is applied in the REDD+ MRV and the extent of the resulting maximum positive impact. If the score is 100% it indicates that technology has been used to its full extent, whereas a score of 0 indicates that technology has not been applied.

19 GLSC to provide current figures as to how much (in percentage terms) of the MRV data has been verified through ground truthing.

20 GFC to provide assessed number of forest licenses that are using advanced technology for resource quantification, ecosystem monitoring, and resource harvesting.

21 The measure is the estimated degree to which the Aichi Targets for Biodiversity (or now, the post 2020 targets) have been realized in Guyana. This will have to be estimated by the UNCBD Focal point through evaluation of progress on activities laid out in the NBSAP. Targets that are with asterisks (*) are suggested.

22 This is a measure of 'mainstreaming' of biodiversity and ecosystems into policy decisions. The indicator will be an assessment of the number of Ministries that have incorporated biodiversity and ecosystems into their annual plans. An example of this type of activity is the "Mainstreaming Sustainable Land Management and Development" project implemented between 2018 and 2021. The 2030 and 2040 targets are estimates based on review of the reports to the UNCBD.

23 UNCBD Focal Point for Guyana to provide assessment of progress on Aichi Biodiversity Target 2 and the post 2020 progress.

24 The UNCBD Focal Point to assess which ministries have incorporated biodiversity and ecosystems into their annual plans.

25 Interpreted as the number of recorded seizures, confiscations, forfeitures of CITES specimens. (https://www.cites.org)

26 Several mining operations are small scale, and artisanal in nature. Environmental management does not appear to be prevalent in the mining sector overall. Therefore a modest target of 30% is suggested for 2030 and a more aggressive (but realistic) target of 70% for 2040. This indicator is to be estimated by the GGMC and should take into consideration practices that are focused on reducing impacts in addition to full EMS implementation.

27 In the context of climate change adaptation, this takes on a new relevance as a strategy to diversify away from carbon-emitting products, markets, and jobs towards industry that is low-emission and climate resilient (UNFCCC, 2020), consistent with the Low Carbon Development Strategy.

28 Baseline GHG emissions to be sourced from UNFCCC National Communications Reports. As Guyana is currently updating its Nationally Determined Contributions (NDCs), all major sectors that are GHG emitters must now also specify targets and indicators. These indicators are derived from the IPCC Working Group 3 Assessment Report 5 (Chapter 11).

29 Mitigation targets to be set by UNFCCC focal point or appropriate individual in the relevant ministry for each sub-sector.

30 No national targets are available; but this first needs a baseline assessment, then assigned targets. The objective of this indicator is to encourage all firms to have some form of environmental policy. When assessing the firms there should be some flexibility. A firm does not necessarily need to have a full environmental management system. They can have an environmental policy or directive.

31 The ranking is used as a proxy indicator of progress and is found at: https://tradingeconomics.com/guyana/competitiveness-index. A target increase in 4 points over 10 years is not unreasonable, particularly considering the economic boom that Guyana is experiencing as a result of the increased offshore oil production. An increase to 10 / 100 by 2040 is a modest goal – it could be higher. The report is made up of 98 variables, from a combination of data from international organizations as well as from the World Economic Forum's Executive Opinion Survey. The variables are organized into twelve pillars with the most important including: institutions; infrastructure; ICT adoption; macroeconomic stability; health; skills; product market; labour market; financial system; market size; business dynamism; and innovation capability.

32 Targets are recommended based on internal review and assessment.

33 UNFCCC Focal point to provide suggested targets. The SDG VNR provides various examples of energy efficiency initiatives but does not provide an overall industrial target.

34 Sustainable fuel use entails use of compressed natural gas as well as gasoline blended with biofuels (from sugar cane). The policy target in the GSDS is 3% of the vehicle fleet being powered by compressed natural gas by the year 2035.

35 This is the policy goal for electric vehicle penetration set in the GSDS.

36 Targets for 2030 and 2040 are based on a review of the GSDS and use of local knowledge of transportation infrastructure in Guyana

37 Targets for 2030 and 2040 are based on a review of the GSDS and use of local knowledge of transportation infrastructure in Guyana

38 The average travel time by car from Georgetown to Lethem is 9 hours and 45 minutes. The GSDS objective is to reduce this time by improving the quality and throughput of the roads. Targets for 2030 and 2040 are based on a review of the GSDS and use of local knowledge of transportation infrastructure in Guyana

39 The improvement in road infrastructure can contribute to a reduction in traffic accidents and also pedestrian fatalities and passenger injuries. The general indicator is number of traffic accidents, which if reduced, will result in less injuries to both pedestrians and vehicle passengers/drivers. The figure of 1580 comes from the Guyana Police Road Accident Database (2016).

40 There are several strategies for implementing low carbon policies in port operations. Best practices should be reviewed with the objective of selecting the most appropriate actions for Guyana. Here is an example: Mat el al, 2016 Socio-ecological transitions toward low-carbon port cities: trends, changes, and adaptation processes in Asia and Europe. Journal of Cleaner Production. 114: 362-375

41 There is a global carbon management standard for airports. These principles should be applied. Full implementation requires third party verification. https://www.airportcarbonaccreditation.org.

42 Resilience of coastal protection systems relates to SDG 13.1 Strengthen resilience and adaptive capacity to climate related hazards in all countries. Coastal protection is a combination of engineered and nature-based solutions. There are multiple co-benefits which can be derived from nature-based solutions (see: https://www.naturebasedsolutionsinitiative.org/publications/the-role-of-ecosystems-in-coastal-protection-adapting-to-climate-change-and-coastal-hazards/).

43 Ministry of Public Infrastructure and NAREI to provide length of coastlines protected by engineered and natural systems.

44 NAREI to advise on baseline for length of coastal protection using nature-based solutions.

45 Apply this indicator to achievements of the following ten (10) regional towns: Bartica (Cuyuni-Mazaruni Region), Lethem (Upper Takutu- Upper Essequibo), Mabaruma (Barima-Waini), Mahdia (Potaro-Siparuni), Georgetown (the national capital), New Amsterdam, Corriverton and Rose Hall (East Berbice-Corentyne), Anna Regina (Pomeroon-Supenaam) and Linden (Upper Demerara-Berbice Region)

46 City plans should be reviewed by the Ministry of Public Infrastructure. There will need to be some component of green principles incorporated – climate resilient building etc. Targets for 2030 and 2040 are based on a review of the GSDS and use of local knowledge of town infrastructure in Guyana

47 GSDS policy directive 3.5.8.4 for Urban Transport and Mobility recommends a study of Georgetown's public transport system and inclusion of an electric vehicular fleet. GSDS Policy directive 3.4.6.1 recommends an assessment of the transition of the transportation sector to low-carbon.

48 "Living Conditions Survey" was conducted in 2006 with World Bank Support and followed up with a more recent "Living Conditions" survey in 2018 by the Bureau of Statistics and the Ministry of Finance.

49 Gini index figures from the 2018 Global Wealth Data Book published by Credite Suisse. A 5% improvement from the baseline to 2030 and then 2030 to 2040 is proposed.

50 Number of Cases in Given period/Total Population * 100,000

51 Figures provided by the Ministry of Health.

52 Hanefield et al, 2017. Understanding and Measuring Quality of Care, WHO Bulletin. https://www.who.int/bulletin/volumes/95/5/16-179309/en/.

53 Number of children in each facility / total in age group (for males and females) per 1000 children

54 Number of persons who are receiving non-formal education and training divided by population for a given year and multiply by 100.

55 Data comes from national CSEC results

56 Tracer study - Number of TVET graduates in a given year employed divided by number of graduates from the previous year

57 From MOE Condition survey - Average condition of superstructure, roof, finishes, sanitation and water supply, electrical installation, and waste disposal facilities. The key used to assess the condition of the structures is as follows: 0-Does not exist; 25 = needs urgent attention; 50 = average repairs required; 75 = Good, minor repairs needed; 100 = new or like new, no repairs needed

58 Draw on the World Bank's Worldwide Governance Indicators: https://info.worldbank.org/governance/wgi/. Government Effectiveness or Voice and Accountability may be used for reporting on this indicator. The government ranking is found here: http://info.worldbank.org/governance/wgi/Home/Reports. Estimated increase in performance to 48 by 2030 and 50 by 2040.

59 Data from World Bank's GovData 360 website (https://govdata360.worldbank.org) can be used. Transparency of government decision making is measured. Score from 1 (difficult) to 7 (easiest) is tabulated. Data comes from the World Economic Forum's Global Competitiveness Index. Eg. "In your country, how easy is it for businesses to obtain information about changes in government policies and regulations affecting their activities?"

60 Can draw on the World Bank's Worldwide Governance Indicators: https://info.worldbank.org/governance/wgi/. Regulatory Quality may be used for reporting on this indicator. The government ranking can be found here: http://info.worldbank.org/governance/wgi/Home/Reports

61 The United Nations Rule of Law Indicators: Implementation Guide and Project Tools, 1st Edition, 2011. (https://www.un.org/en/events/peacekeepersday/2011/publications/un_rule_of_law_indicators.pdf)

62 UNDP - Amerindian Land Titling Project. https://www.gy.undp.org/content/guyana/en/home/operations/projects/environment_and_energy/amerindian-land-titling.html

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CONTACT DETAILS
Ministry of the Presidency
Department of Environment, 68 High Street, Kingston, Georgetown, Guyana
PHONE: 592 223-6313
EMAIL: ddoe.motp@gmail.com