
THE SENATE DEBATES

(UNOFFICIAL REPORT)

PARLIAMENT 2013 – 2018

THE SENATE

Wednesday, December 7, 2016

The Senate met in the Senate Chamber, Parliament Building on Wednesday, the December 7, 2016 at 11.00 a.m.

PRESENT

Her Honour Senator Miss Kerryann F. IFILL, B.Sc. (Hons.) M.B.A., (President) His Honour Senator the Very Reverend H. E. CRICHLAW, G.C.M., B.A. (Hons.) Dunelm (Deputy President) Senator the Hon. Miss M. P. O. McCLEAN, B.Sc (Hons.) M.A., M.B.A. (Minister of Foreign Affairs and Foreign Trade) (Leader of the Senate)

Senator the Hon. D. W. BOYCE, B.Sc. (Econ.), M.B.A. (Fin.), CMA, F.C.A. ((Minister in the Office of the Prime Minister with responsibility for Energy, Immigration, Telecommunications and Invest Barbados)

Senator the Hon. P. M. T. Todd, B.Sc. (Minister of State in the Office of the Prime Minister)

Senator H. A. HUSBANDS, M.L.I.R., B.Sc.

(Public Administration) (Hons), Ed. Cert. (U.W.I.) (Parliamentary Secretary, Ministry of Education, Science, Technology and Innovation)

Senator J. INCE, J.P., B.A., M.B.A, Dip (Mgmt.)

(Parliamentary Secretary, Ministry of Finance and Economic Affairs)

Senator R. A. HUNTE, J.P.

Senator Rev. Dr. D. L. DURANT, D.D. (Hon.)

Senator Miss V. A. G. De Peiza, B.Sc. (Hons.), LL.M. (Merit)

Senator Dr. J. X. Walcott, M.B., B.S., F.R.C.S

(Edin.) J.P.

Senator Sir Roy TROTMAN, K.A., M.A.

Senator Prof. Emeritus Sir Henry FRASER, K.A., G.C.M., C.M., B.Sc. MBBS., Ph.D., FACP, FRCP.

Senator Dr. Sir Trevor Carmichael, K.A., L.V.O., Q.C., B.Sc., (Econ.), M.A., Ph.D.

Senator A. A. ADAMS, J.P. B.A., Ed. Cert., M.Sc. Ed.

Senator J. A. WATSON

Senator Carol Lady Haynes, M.B., B.S.

Prayers were led by Reverend Cannon Errington Massiah.

MADAM PRESIDENT: This Senate is now in Session.

ANNOUNCEMENTS BY HER HONOUR THE PRESIDENT

MADAM PRESIDENT: I am in receipt of excuses for the following Senators: Senator Mrs. V. I. Sandiford-Garner, Senator Dr. the Hon. E. R. Byer Suckoo, Senator A. R. Worrell and Senator W. A. Abrahams who will be unable to join us for the duration of this Sitting.

PRESENTATION OF PAPERS

Senator the Hon. Miss M. P. O. McCLEAN: Madam President, I am commanded to lay the following:

1. Duties, Taxes and Other Payments (Exemption) (University of the West Indies, Africa World Documentary Film Festival) Order, 2016;
2. The Duties Taxes and Other Payments (Exemption) (University of the West Indies Commonwealth Shorts) Order, 2016; and
3. The Child Care Board Financial Statements for the year ended March 31, 2015.

INTRODUCTION OF BILLS

Senator the Hon. Miss M. P. O. McCLEAN: Madam President, I beg to give notice of a Resolution to approve the guarantee by the Minister of Finance of the payment of the principal sum of BDS\$12 million to be borrowed by Needham's Point Holdings Limited from FirstCitizens

Bank (Barbados) Limited for the purpose of assisting with renovations to the Hilton Barbados Hotel.

I further beg to give notice of a Resolution to approve the guarantee by the Minister of Finance of the payment of the principal of interest in respect of the issuance of a Bond of up to BDS\$73 million or US dollar equivalent arranged by ANSA Merchant Bank Limited for the purpose of providing working capital support to the Barbados Agricultural Management Company Limited and to provided funding to the company's expenses and costs relating to the Barbados Cane Industry Support Project.

PUBLIC BUSINESS

ORDER No. 1

RESOLUTION THAT THE PARLIAMENT OF BARBADOS:

(1) ACCEPTS THE BARBADOS GREEN ECONOMY
SCOPING STUDY AS A NATIONAL
INFORMATION DOCUMENT;

(2) AGREES THAT THE BARBADOS GREEN
ECONOMY SCOPING STUDY BE MADE AVAILABLE
TO THE PUBLIC OF BARBADOS THROUGH THE
NATIONAL LIBRARY SERVICE AND THE ONLINE
PLATFORM OF THE GOVERNMENT INFORMATION
SERVICE;

(3) LAUDS THE EFFORTS OF THE VARIOUS
STAKEHOLDERS ENGAGED IN THE PRODUCTION
OF THE BARBADOS GREEN ECONOMY
SCOPING STUDY;

(4) REMINDS BARBADIANS OF THE IMPORTANCE
OF CONTINUING TO BE GOOD STEWARDS OF
THE COUNTRY'S NATURAL
ENVIRONMENT; AND

(5) REAFFIRMS ITS COMMITMENT TO
ENSURE BARBADOS REMAINS ON A PATH OF
SUSTAINABLE DEVELOPMENT THAT IS SOCIALLY
BALANCED, ECONOMICALLY VIABLE,
ENVIRONMENTALLY SOUND AND
CHARACTERISED BY GOOD GOVERNANCE.

MADAM PRESIDENT: Senator McClean, you have the Floor.

Senator the Hon. Miss M. P. O. McCLEAN: Thank you very much, Madam President. I rise, Madam President, to pilot this Resolution. I believe it is important given the nature and importance of the substance of the Resolution that I again read the Resolution in its entirety. As we know

this is a Resolution to move that the Parliament of Barbados would in essence accepts a number of things, and the Preamble is as follows:

WHEREAS the Government of Barbados acknowledges that throughout its history successive Governments have committed themselves to ensuring that Barbados remains on a path of sustainable development:

AND WHEREAS Barbados affirms its continuing commitment to work responsively and ambitiously to make Barbados the most environmentally advanced green economy in Latin America and the Caribbean:

AND WHEREAS the Government of Barbados undertook a Green Economy Scoping Study aimed at supporting and complementing national initiatives on the green economy through macroeconomic assessments and policy analysis, a policy analysis that underscored how Government policies public and private investment can help achieve the fundamental macroeconomic objectives of income growth, economic development/diversification and job creation while at the same time pursuing a path that contributes to social equity and environmental improvement;

AND WHEREAS the Barbados Green Economy Scoping Study focused on an analysis of agriculture, fisheries, building/housing sector, transport and tourism sectors within the context of environmental resource issues of water, energy, waste and land;

AND WHEREAS the Barbados Green Economy Scoping Study undertaken by the University of the West Indies, Cave Hill Campus and the United Nations Environmental Programme was formally completed on June 05, 2014;

AND WHEREAS the Barbados Green Economy Scoping Study undertaken through a stakeholder-driven approach, inclusive of representatives of Government, trade unions and private sector, academia and other non-governmental organisations heralds a watershed moment for national engagement in the advancement of the Barbados environmental and sustainable development agenda;

BE IT RESOVLED that the Parliament of Barbados:

(1) Accepts the Barbados Green Economy

House C35 Sequence 1

11.35 a.m.

Wednesday, December 07, 2016

Senator the Hon. Miss M.P.O. McCLEAN: . . .

Madam President, the Resolution goes on to say:

“BE IT RESOLVED that the Parliament of Barbados:

(i) Accepts the Barbados Green Economy Scoping Study as a national information document;

(ii) Agrees that the Barbados Green Economy Scoping Study be made available to the public through the National Library Service and the online platform of the Government Information Service;

(iii) Lauds the efforts of the various stakeholders engaged in the production of the Barbados Green Economy Scoping Study;

(iv) Reminds Barbadians of the importance of continuing to be good stewards of the country’s natural environment; and

(v) Reaffirms its commitment to ensure Barbados remains on the path of sustainable development that is socially balanced, economically viable, environmentally sound, and characterised by good and transparent governance.”

Madam President, I took the time to read that because as we look at the task that is before us, that is to ensure that the Parliament accepts this document, and accepts it most importantly as a national information document, I propose to speak to a number of things which would, hopefully by the end of my presentation, highlight the critical importance of the document, not only for Barbados as a country executing domestic policies, but also for Barbados as a Member of CARICOM and other regional and hemispheric bodies, for example, CERLAC, a body of Caribbean and Latin American countries, a member of the Organisation of American States which is another hemispheric body. Therefore clearly Madam President, you can see that I am bringing to the discussion my perspective as Minister of Foreign Affairs and Foreign Trade but also as Barbados as part of the global nation of families. Madam President, in my contribution I hopefully by the end of my presentation would have done a couple of things:

(a) Given a clear understanding of what is the Green Economy Scoping Study;

(b) What is its value as a national information document;

(c) Who should take the time to review the document and why.

(d) Of course, coming from my colleagues on this side, we should have a clear understanding of how does this Administration propose to use the document.

Madam President, I would want to say very quickly that from perspective and certainly that of Cabinet and my Parliamentary colleagues it is and should be recognised as an important planning document. I will also touch on the question of what constitutes a Green Economy, in terms of definitions and also what needs to happen in order to make it real as Barbados pursues its vision of a Green Economy.

Madam President, as is the norm in my contributions I like to put things into context and therefore I would want to explore some of what I would consider to be important timelines as I seek to contextualise the Green Economy Scoping Study. I can go back as far as probably 1992, I think it was, when there was a major climate related conference in Rio, but I would want to flag the 1994 conference held at the Sherbourne Conference Centre as it then was known, the United Nations Global Conference on the Sustainable Development of Small Island Developing States. I would suggest that is where we also saw the acronym S.I.D.S. become very much part of the international discourse. Madam President, what I would want to say is that from my perspective that conference heralded what I consider to be the start of Barbados’ very active involvement in the global discourse on sustainable development and more especially the discourse on the vulnerability of Small Island Developing States and also the need to address the phenomenon of climate change.

Madam President, I could also flag a 2007 contribution in the budget debate of that year, that is before the end of the previous Administration and consistent with the Strategic Plan that was prepared for 2006-2025, the Prime Minister of the day spoke of the inclusion of green policy objectives. In 2009, the late Prime Minister, the Honourable David Thompson, amplified the focus in his call and challenged to the nation to join him in pursuing his vision of Barbados becoming, and I quote, “the most environmentally advance Green Economy in Latin America and the Caribbean”.

Madam President, I would want to flag and that is inferred perhaps by my references to conference in Rio, for example, and the United Nations Conference on Small Island Developing State in Barbados, it is important to note that these calls and certainly the call as was articulated by the late Prime Minister, David Thompson, were consistent with the international community's response to two very real phenomenon that we have been facing and we were certainly then and will continue to face, that is the very real global and financial and economic crisis which manifested itself very clearly towards the end of 2007 and has continued to impact the global economies up to this date, and of course the increasing evidence of the impact of climate change.

Madam President, beyond those domestic issues, the focus at the level of our Heads of Government, in 2012 the world went back to Rio again and that is where perhaps the concept of a Green Economy was again put to the world in a very significant way. In June, 2012, to be precise, the world's attention was further focussed on this issue at the Rio-plus-20 Conference and here the global economy was very much the theme of that conference and specifically the focus was, and I quote: "a green economy in the context of sustainable development and poverty eradication." In the discussions that took place in Rio it became evident that there was a clear compatibility with the goal of sustainable development and this was made very clear.

Madam President, in fact, if we look at the whole issue, it would be useful as I said, to give people a sense of what was promised and what is meant by the Green Economy. Madam President, at that conference there was a promise made by the global family of nations that in pursuit of this vision of a Green Economy, it is expected, was expected and continues to be expected that we will be pursuing, domestically and internationally, a new economic growth paradigm, as it says, that is friendly to the earth ecosystems and which can also contribute to poverty alleviation.

Madam President, as such, when we talk about a Green Economy, we are talking about a complex mix of issues that have to be addressed and that obviously would have to be addressed in a serious way if that is supposed to happen. Madam President, therefore on the basic premise of that theme of the Rio-plus-20 Conference in 2012, the world and certainly Barbados committed... Many of the nation of the world have actually done very explicit statements of how they plan to pursue Green Economy status but Barbados has very much been part of that commitment and so the world has committed to the pursuit of Green Economy status, which is seen as a preferred strategy if we are to battle two major global threats which I have mentioned before.

Madam President, I think I will repeat them because I think we need to understand what we are seeking to do in major measure when we talk about the pursuit of Green Economy status. We know, of course, that climate change is very evident. We have just recently celebrated the end of a yearlong celebrations of our 50th Anniversary of Independence and Tuesday of last week we had to deal with what perhaps is an unusual phenomenon for most Barbadians.

Madam President, I am significant older than you are and I can tell you that the deluge that we saw on Tuesday, the heavy rainfall that we saw, I have never seen it in my life. The reports that came to me were that Barbados on that day received between six and seven-and-a-half inches of rain, and that comes at a time when we have been experiencing, certainly last year and up to that time, major drought. Even the timing of the rain; we were coming to the end of the hurricane season, and we know how that panned out, but we saw this. Climate change is very real. Madam President, we also have been experiencing this year, when we talk about climate change, some of the highest temperatures that the globe has ever seen. Many people comment on the extreme heat that we have been experiencing over the year and certainly into this latter quarter of the year. We also, beyond climate change, talk about issues of damage to our coral reefs. If I move outside of Barbados, for example, and we go to Australia which has the world's largest Barrier Reef, they lost a significant part of that Barrier Reef to coral bleaching this year, and that has significant implications not only for that country but for the region around it. As we look around the world, we see evidence of the impact, and for us in Barbados, what we recognise is that even though we are not one of the major contributors to climate change, which is due to increased greenhouse gas emissions, we are likely to be one of the major casualties of the manifestations of climate change.

If environmental threats are not enough, Madam President, we have had to battle, as a small, open economy, with the impact of the worst global financial and economic crisis in recent memory. Of course, we know what was identified there. In essence, what we have been facing is the phenomenon, or two phenomena, really, which have not bypassed Barbados. As I said before, environmentally we are a Small Island Developing State vulnerable to the consequences of climate change, and I gave examples of those kinds of things; and economically we are a small, open economy, thus the vulnerability to external shocks. We depend very heavily on tourism and we know that tourism is particularly susceptible to changes in the economic circumstances of the people in our source markets. We saw what happened. We are now going through a phase where we are essentially recovering from that, but we also recognise that even if we look at our international business sector, the performance of that sector

would also have been impacted by all that has happened in relation to the performance of companies in several jurisdictions from where we draw our business.

Madam President, in essence, one of the things that we have had to deal with is the situation where we in Barbados have had to look and deal with a number of factors which impact on how we do business, how we perform as a nation, and how we need to respond in anticipation of future impacts. Part of doing that, of course, was an effort to pursue strategies which will help us to address those things in a way that protects our physical environment and continues to create opportunities. Given these realities, Madam President, Prime Minister Stuart has committed in the 2013 Manifesto of the Democratic Labour Party to pursue the vision of a Green Economy, and in fact in the Resolution reference is made to the fundamental pillars which should inform our efforts in relation to that economy, and they bear repeating at this point. If we are to continue to realise the gains that we have made over the last 50 years -- and I refer to that because of our recent celebrations -- we have to do so in the pursuit of what we also describe as a just society. A just society, as envisaged by our first Prime Minister and subsequent Prime Ministers, would have to be socially balanced, economically viable, environmentally sound and characterised by good governance. These are things that we have been pursuing for a long time, so even though we have been part of that family of nations to which I referred earlier, it is important to recognise that we have not necessarily been followers on this but we have really been taking the lead in many ways. If I go back several years -- and those who are familiar with what was then our leading economic sector, the agricultural sector and more specifically sugar -- Barbados was using wind power long before the world was talking about climate change, et cetera. When we look at some of those things, we can see that as a small country we have been out front; and that was before my time but I can come closer to my time or during my time. We have been leaders in the use of solar energy for water heating and so on; so again that was something we have done in this country for many decades. There is evidence that we have been very concerned about our environment and addressing some of the challenges which continue to pose a threat to the world from an environmental perspective.

As I said, there is that commitment to a vision of a Green Economy, and we can ask ourselves what are we talking about when we speak of a Green Economy. In fact, as with any phenomenon or any concept, there hardly is a single definition; but I can tell you that within the context of the Green Economy Scoping Study there are some definitions in there, and I would want to speak to those in terms of what has been identified. Certainly, Madam President, we have posited in Barbados a definition, and I would draw people's attention -- maybe that is the teacher

in me but I like to have working definitions so that when we speak of something, at least people appreciate my understanding of the concept in this case -- to Page 3 of the Executive Summary of the Green Economy Scoping Study Barbados:

"A Green Economy is defined as an integrated production, distribution, consumption and waste assimilation system that at its core reflects the fragility of our small island ecosystem as the basis and natural resource protection policy intervention, business and investment choice, human development programming, and the facilitation of export market development strategy."

I would say that, using our definition in Barbados, it allows us to appreciate that we are talking about pursuing a goal which has implications for our several economic sectors. It has implications for Government policy. It has further implications for how citizens operate in their domestic space - in other words, within their family arrangements, their neighbourhoods, et cetera -- and how people operate on the job. It also has implications for what our educational programmes should be. In essence, we are talking about an arrangement which speaks to a system that involves significant change in how do we things, how we see the world, what we emphasise, and how we utilise resources at the level of production or at the level of consumption. Basically, that definition is consistent with what I would call some of the international definitions and, based on that, I would share one other definition before I go on to talk a little bit about some of the things that we need to address.

Having shared or read to you the definition that we have in our Scoping Study, we could also look at another definition which was given within the context of South Africa's articulation of their approach.

11.54 a.m.

INSERT S4 JULIETTE

Wednesday, December 7, 2016

SENATOR M.O.P. McClean: ... section and the activities in the country. Transportation which has been highlighted here is another critical area. I mentioned the issue of climate change. Therefore, the use of fossil fuels or the reduced use of fossil fuels certainly would be a consideration. We also need to look at our transportation strategies. Does every Barbadian have to ... not every Barbadian. The number of Barbadians who currently drive themselves, do they have the necessary private transport? Is there scope for enhanced public transportation to reduce the congestion on our roads, to reduce the emission of exhaust, et cetera. Of course, tourism. Tourism is a major sector but it is also a sector in which significant resources are utilized.

In fact a regional study undertaken with have indicated that a major cost in terms of the operating cost for our tourism plants and so on is electricity.

Therefore, in addition to addressing the use of fossil fuel, for example one of the areas that would be addressed would be the whole question of use of renewable energy and the whole question of looking at efficiencies.

So the document, Madam President, as I said in terms of the executive summary, it gives us that background of why the study. It then went on to look at what areas should merit focus because of the significant impact that they can have on the greening of the economy or the maintaining of what we call a brown economy, that being the situation where we address problems of pollution and all of those things. Of course, in addition to that, because of the very comprehensive and complex nature of this phenomenon it also addresses the analysis of enabling conditions for transition. In other words, what are the things that must happen if we are to transition to a green economy in an efficient and an effective manner? In the study it mentioned some of the things I spoke to before. It talks about finance. There are clear financial implications for actions to be taken. We also have to focus on technological implications of what we need to do. If we want to look at our various systems whether it is production or consumption, we have to focus on developing clean technologies if we are talking about greening, but what are the implications for trade, for investment, for taxation?

I mentioned education earlier. Of course as we introduce new systems it is important that we also pay attention upfront to the setting of standards and implementing of regulation. Of course, the issue of Government activity is included.

Those are some of the broad areas, Madam President, that are fleshed out in the study. I think in doing that, what we perhaps have been able to look at would be a situation where we have a proper appreciation that as we assess the conditions that would give rise to the ability to achieve green economy status we have to be clean as to what are the processes involved, the requirements across sectors, et cetera.

The other thing that I want to touch on as part of my introduction of this Resolution would be the whole question of ...I am sure these would be amplified by my colleagues. It is the whole question of what are some of the actions taken to date. In looking at those actions taken to date we can focus on domestic, regional and international actions. I have mentioned in terms of, and I can go international and come back. In Barbados we are part, as I said before, of the global family of nations. In looking at that, we have been very vocal advocates in the various

United Nations fora. We would have heard on previous occasions of the contributions that Barbados made to the several conference of the parties held by the United Nations to discuss climate change, whether it was most recently in Marquis, or before that last year in Paris. Or we can go back to Copenhagen, and some years ago South Africa. Barbados has been very vocal. In fact, as you will recall, Madam President, one young Barbadian who now has been appointed as our Ambassador to Washington, was very much involved and his contribution was recognised in the invitation by the Secretary General of the United Nations. I am speaking of Mr. Selwin Hart, who would have been invited to head a team of advisers to the Secretary General, and in that role was one of the youngest persons to hold such a position. So we have been very involved.

We have kept on the table the concerns that we articulated in 1994, and this has led to a number of critical decisions, one, of course, is the whole question of the world seeking to support financially the remedial kinds of actions that have to be taken. Therefore Barbados was very instrumental in helping with the setting up of the Green Climate Fund, which is a global fund. I hope that we are able in similar measure to draw down from that fund in the way that we advocated and pushed for it, that we see some of those benefits. I can tell you from my understanding significant projects have been submitted for consideration to that fund.

At the international level one example of actions to date would have been our lobbying and advocacy and also being part of the kinds of institutions, at least being part of the decision making in terms of the design and structuring of institutions to respond to some of the challenges that would have taken.

At the level of CARICOM, which is regional, we are very much part of a regional body. We call it the 5Cs, the Caribbean Climate Change Centre. I do not have it in full order so I will call it the 5Cs. It is an agency addressing a range of climate change issues established and operating out of Belize, which is one of the member States of CARICOM. That agency has been very much in the forefront of addressing the challenges that we face across the region whether we are talking about issues relating to sea level rising and things of that nature, and continue to work on finding solutions to some of the problems that climate change poses to us.

If I can come home as an example, Barbados has identified and pursued, and certainly this administration has brought to this Parliament pieces of legislation intended to foster the youth of renewable energy in Barbados, whether it in legislation to regulate activities or legislation to put in place incentives for the use of renewable energy, or incentives to invest in renewable energy. We have heard on

multiple occasions the kinds of arrangements that have been put in place.

We have focused also on the issue of the environment and one the challenges that we face as a small country and a small country that is growing increasingly affluent and demonstrating the kind of consumption patterns that illustrate that growing affluence among parts of our population, and that is the whole question of the consumption behaviour of our country, and the whole question of how we dispose of waste, et cetera.

Again, we have come to Parliament on multiple occasions to address the whole question of waste disposal. I would want to say, Madam President, on that score that while I laud the efforts to date, and this is not something unknown to some of my Cabinet colleagues. I certainly have had this discussion with the Prime Minister. I have made comments about it in several fora with my colleagues. That is, we have to spend more time to revisit our existing efforts on waste disposal particularly as it relates to the identification of recyclables. We have systems now, which to my mind are less than efficient and I believe we need to go back to the drawing board particularly where we educate the public about the need to separate garbage.

I am very clear in my mind as I observe, talk to friends and family, and I see examples of efforts in community that where we revisit and we refine our collection processes, we will in fact find ourselves generating substantially more recyclable materials and less of the kind of waste. That can only happen, as I said, in a more efficient and effective way if we institute the requirement for separation, but more importantly, that separation has to be supported by the kind of collection methods that will make it work the while. If I separate to have it thrown into a single garbage truck, that makes no sense. I think that is an issue.

In terms of the environmental protection whether it is the whole issue of us moving to renewable energy, whether we are looking at production techniques in agriculture, that is important.

In terms of manufacturing, I know, in terms of actions to date, one of the things that we would have looked at and, of course, and we are working on is to look at the whole processes by which our manufacturing operations are taking place. I believe my colleague, the Minister of Commerce and Business, has been working with UNIDO, the United Nations Industrial Development Organisation, to put certain programmes in place. I can go on and illustrate them.

Of course, in education there are a number of things that are happening and must happen. I believe we may hear

of some of those things as the debate goes on, but if we are moving to transition to a green economy, in the area of energy for example renewable energy, training and development of resource persons is critical. We have started that process of training persons who will have the technical knowhow, technicians and so on, to work in the renewable energy sector dealing with issues of solar energy, et cetera.

We also have at the level of our education system to address the whole challenge of innovation. I know and I have spoken to it here before, and my colleague, the Minister of Labour would have spoken about it previously, which we have also to look at the question of revisiting our entire education system. I do recall by making reference to a consultancy with a prominent Barbadian who has been working with a project supported by the Ministry of Labour to revisit the entire development of science, technology, engineer, mathematics, teaching and development of persons in those issues. Of course there is also scope for the sensitizing of Barbadians.

I think, Madam President, as we look at the whole question of what has happened so far, we have done a number of things in Barbados. We have looked at our sustainable development policies. We have a medium-term development strategy in place. We have looked at amendments for our physical development plan. We have also talked about energy policies, sustainable energy framework. In essence when I make reference to those things, to the existence of a number of ongoing policy intervention in Barbados, the issue of solar water heaters is something we need to revisit again.

We also would have dealt with the issue of environmental protection. I can tell you that as we look around the coastline of Barbados and as many Barbadians and visitors enjoy our boardwalks on the south coast and now the west coast that is not only something to provide recreational space. That is also part of our coastal protection infrastructure. So there are a number of things that have been going on there.

In terms of other public investments, one of the things we would also recognized, at the level of tourism undertaken certain interventions, consistent with the kind of recommendations that have been discussed and documented in the scope and study, many would

Recognized that significant money was spent on Harrisons Cave as part of what was intended to be an integrated development programme. What that did for example, it shows the world that we have in terms of the trams that transport our visitors to the Cave, is one of example of a low carbon transport designed where we are using clean technology, and I can tell you it is indigenously designed technology as well.

There are several examples, Madam President, of how we have been able generally to engage in activities to ensure that we have a programme of action to support our vision.

What I have attempted to do, Madam President, in terms of leading off this debate was to demonstrate a number of things, as I said before, that the scope and study was part of a bigger picture of taking some time to bring together a cross-section of stakeholders to explore how best to pursue green economy status. We did so by bringing together critical partners in the areas I have identified before, public and private non-governmental organizations, academic, and of course our regional partners as well. We have built on that by engaging at the level of CARICOM as well as SALAC and the OAS for example, along with the normal avenues within the United Nations in order to be able to look at how best to develop strategies, to develop programmes and implement those programmes in a way that will allow us to pursue what in effect is a sustainable development agenda. As you look at the whole notion and definition of green economy, what we are really looking at is a description of what sustainable development looks like once we have achieved some level of sustainable development. What it is we are striving to achieve at the end of the day.

Then basically, Madam President, I think that in setting out what I did, hopefully would have demonstrated the importance of the exercise. I also hopefully would have demonstrated that it is not a document that was put together and will be forgotten. It is essentially a working document or a reference document, a document, as the Resolution says, a national information document, one which can be consulted by any stakeholder group or individual, one that can be used to also educate Barbadians either formally or informally, and certainly one which to my mind should be utilized by decision makers. When I say decision makers I am talking about decision makers in the private sector as companies look to move forward in terms of their approaches to improving productivity and profitability in terms of strategies for investment and so on.

I believe also, Madam President, that in doing that it demonstrates to the world that we have seriously thought about how we will go about greening this economy. We have seriously thought about what should be done in that process. It helps us to flesh out who does what and when. Therefore at the end of the day, I believe as we utilise this document domestically and we share ... it has been looked at and I know some of our member States have followed Barbados' lead

I have seen a couple Scoping Study which I must confess are not as comprehensive in scope as ours. I think we really put the effort to pull as much as possible out of the discussions and the deliberations.

I would want to thank those technocrats, in particular the officers in our ministries, certainly the Ministry of the Environment and Drainage and the officers there would have taken the lead, and others who would have participated because I believe, Madam President, that by having this document prepared and having agreed to make it readily available to all who would want to read it that we are in fact doing something which, without repeating all that the Resolution says... I think I could cite the last of the items in terms of the Resolution and having spelt out all that I did I hope that I have illustrated that this Administration remains committed to and thereby reaffirms its commitment to ensure that Barbados remains on a path of sustainable development that is socially balanced, economically viable, environmentally sound and characterised by good governance if we are to use singularly and collectively, individual citizens, individual companies and various Government departments as they engage in the exercise of Government policy, et cetera, this as an information tool.

With those words, Madam President, I beg to move that this Resolution do now pass.

MADAM PRESIDENT: Senator Fraser, you have the Floor.

Senator Prof. Emeritus Sir Henry FRASER: Thank you Madam President. It would be difficult for anyone to find reasons not to support this Resolution, it is obviously a splendid one. Even though it comes some 23 years after Rio, I believe that the late Colin Hudson would be delighted with what we are seeing here because these were his messages for 30 years.

Certainly, Madam President, the Green Economy Scoping Study is a tour-de-force. It is a splendid document of 220 pages and it demonstrates the value of partnerships. From my reading of the Synthesis Report, I have not been through the full document in this regard, there are more than 25 institutions, organisations, departments, ministries and other units, involved in a partnership with the United Nations Environment Programme, so it is a superb example of partnership, and the number of stakeholders and the number of representatives involved look like almost 100 individuals. Now, while too many cooks can spoil the broth I would like to think that the representation made by those multiple individuals into the document have resulted really in something of considerable substance.

Madam President, I was impressed with many aspects of the document. Although with the five themes or the five subjects which were explored in detail or scoped in detail if you will, I was surprised that environment has not been treated as a specific entity although I recognise that environmental issues do go through some of the other topics both in relation to tourism and to transport and

agriculture and so on, but I would have thought that environment justified being considered on its own.

I was impressed, Madam President, by the words of the Honourable Prime Minister in terms of his summary and some of his statements which I thought were exceedingly eloquent: The Government wishes to assist in its quest to further integrate environmental considerations into the country's social and economic fabric, and then he concludes by saying, committing the Government to working assiduously with the Social Partnership to ensure that the methods identified which can contribute to a more prosperous and environmentally sensitive Barbados would be implemented expeditiously. My emphasis there is on the role, importance and value of the Social Partnership of which I think we would all like to see a great deal more activity in terms of the partnership and the value of that partnership.

Just a few words, Madam President, on some of the specifics. In agriculture, we have had a period in Barbados almost contemporaneous with our independence of 50 years where agriculture has been so much on the backburner. In the document itself in the section relating to agriculture the point is well made that the results of the Study suggests that the key challenges facing the island's agricultural sector relate to the lack of quality of research and developmental infrastructure, the low financial capacity of regional and international institutions and the problem of praedial larceny which so discouraged everyone in agriculture from the big farmer to the small farmer. This is a tragedy which we have still not found a way of dealing with and it is prioritised here, it is emphasized here in the document and it is a matter of extreme urgency.

The document continues: To support the growth that is necessary, a comprehensive and sustainable agricultural development plan would be required. It is almost a tragedy that we are having to say this 50 years after independence because we would have thought that this would have been a priority for every single Government notwithstanding the famous Cane Blade Speech.

It continues: The major role of Government in supporting the transition towards sustainable agriculture would be in areas of policy development and implementation including the provision of incentives to the private sector. We have to keep reminding our private sector that they have huge responsibilities and often will not step up to the plate. Agriculture must be sustainable because it is the only way that we would reduce our huge import bill for food which is one of the major problems of our negative balance in trade and foreign exchange.

In relation to housing, Madam President, the concept of green building is eloquent and impressive. One of the contradictions is of course that I see green building as that

which does not depend on air-conditioning. Now, we do not do architectural training at our own university although it is possible in Jamaica where architectures are trained in tropical building but we have far too many buildings which are absolutely dependent upon air-conditioning at high costs and high carbon footprint. I am not sure how successful we are in terms of solar air-conditioning but the issue of green buildings is a problem because in many parts of Barbados if you go a building that rely on local Bajan air-conditioning, that is cross breeze, the breeze coming in through large open windows on the east side and passing through the house and you rely on fans which are very much low in the intensity of electrical requirements than air-conditioning then you would be plagued by the excessive noise that surrounds us at decibel levels that are deafening us all so, Madam President, we do have a problem with the contradictions of a lot of the elements of green building because it almost creates intolerable living conditions because of our noise factors so until we can learn to control the noise which is one of the environmental issues and until we can bring the noise pollution bill that is being in and out of discussion for the last 20 years led by Mr. Carl Moore and others... I remember way back when Elizabeth Thompson was Minister of Health it was in and out of her ministry. We have noise pollution at a major level which really creates problems for those who try to build green in terms of not utilising high electricity building requirements through air-conditioning so that is major issue that we need to think about.

The other issue, Madam President, to which we occasionally pay lip service is the fact that green building requires conservation rather than importation of high costs imported materials. Huge aluminium sheets and vast glass structures and so on are high costs, high importation and high foreign exchange. Restoration and repair of older buildings is far, far, far more economical and is a constituent of what one would include under the heading of green building, but we do not practice it because in Barbados new is the goal standard.

With those comments, Madam President, on green building let us move on to transport. I was rather struck by the fact that it is widely recognised that Barbados is almost a gridlock and there is tremendous congestion around Bridgetown and on a couple of occasions when folks in Bridgetown have been asked to leave work early for one reason or another, either climatic challenges or some other reason, then people spend hours in their cars. Madam President, for example, the flood rains led to my spending 2¾ hours to get from Warrens to home at Uptons, along the highway going through the two roundabouts and going along what I call the ABC Parkway, because it really is a parking lot most afternoons, you spend an hour on it before 4:00 and 6:00 in the evening but in this case it was 2¾ hours driving through the rain, and in Bridgetown we have seen the situation of Bridgetown being in gridlock and yet

in the document there is a precedent statement that congestion in Bridgetown was also caused by on-street parking due to limited off-street parking facilities and the solution recommended here to green Bridgetown is simply to charge for on-street parking, rather than to move the cars off the streets. Now we have fortunately in the last 15 to 20 years recognised the importance of high-rise parking. I am told that the high-rise parking on Hincks Street is not adequately utilised and that that building is therefore being utilised to accommodate the Immigration Department but clearly we need to move the cars off the streets because we need movement in Bridgetown. We do not need Bridgetown to be a parking lot.

Madam President, the other thing that was mentioned at the time of Cricket World Cup and was instituted very briefly and I thought would have solved a great many problems for us in Barbados is the principle of park-and-ride. park-and-ride was heavily instituted at the time of Cricket World Cup but it was not followed up and it does seem to me that the facilities provided in cities like Oxford and another of other cities where central city congestion is too much of a problem for people to allow the movement of many cars through the towns and most of the main streets have therefore been converted into the ever popular pedestrian walkways, something which many people should be the case in Broad Street. We can only do that if we employ the possibility of park--and-ride under a number of facilities, a number of open spaces a couple of miles out of Bridgetown in all directions which could be utilised for people to drive, park their cars, get into an air-conditioned coach and be in Bridgetown in ten minutes, instead of spending 30 minutes in congested traffic. Madam President, those are a couple of thoughts on the measures that we need to reduce the amount of congestion, to reduce the amount of toxic fumes that we would be breathing in on our roads.

Madam President, the issue of tourism it is emphasised throughout the document how great a heritage we have in Barbados going back several hundreds of years. I particularly like the references, for example, to the freedom footprint and the slave hospital at the Grantley Adams Secondary School, something that we have not yet taken advantage of. The historic Bridgetown inscription by UNESCO is a golden gift given to Barbados in terms of its branding for tourism so that Barbados can be conceptualised as the paradise with everything, not just the beaches, but the paradise with tremendous historic and natural resources. This is something that the document has emphasised and I do hope that the relevant authorities will take this very seriously.

Madam President, I quote, "of particular interest is the fact that heritage and community-based tourism hold significant potential and the exploitation of these strengths is however dependent on the island addressing a number of

challenges in relation to greening the industry and so on. The heritage tourism sites which we ignore, to our peril, the future of Barbados' tourism because there are places, although we may not like to accept it, with better beaches than Barbados.

Madam President, in concluding what I would really like to say is that there is a lot in the document to make us think. It is a Scoping Study and so I understand that it would not be setting out recipes for the details in which one would have to go in each of these areas but it certainly has done a magnificent job in terms of its comprehensiveness.

Madam President, what bothers me is that when we think of grand schemes to turn Barbados around -- and the point has been made that the Green Economy Scoping Study would be one of those historical developments in the development of Barbados rather like the transition from the sugar industry to tourism -- is that we neglect the things that we are seeing in Barbados that are basically commonsense and much of the greening of Barbados relates to commonsense issues and many of the problems that we have in Barbados relate to our own inefficiencies.

Madam President, I will not say much about it but the inefficiencies of the Sanitation Service Authority's inability to manage their trucks so that there are so few trucks on the road, so that garbage remains piled up to create environmental, aesthetic, health and tourism challenges for the country is something that has obviously been expanded upon and spoken about by people with much more eloquence and passion than I can muster today, but the Sanitation Service Authority is an example of the failure to apply the commonsense principles of good economic management in the interest of greening of the economy and we cannot green the economy without an efficient Sanitation Service Authority.

Madam President, similarly, the Barbados Water Authority. The Barbados Water Authority I have known for more than 30 years. I think I have mentioned previously some 37 years ago when I spoke to Mr. Sealy, the Head of the Barbados Water Authority, about the difficulties I was experiencing in my own home and he explained the problem of water supply. He talked to me then about the leakages of the ancient pipes which I gather had never been changed even from the New Castle Spring into that part of St. John and the assessment of the amount of waste water through leakage was apparently in the late 1996 estimated, I believe, by one consulting team in Barbados to be about 60 per cent of the water that was theoretically available.

Madam President, this was challenged by the Barbados Water Authority and in 2000 someone, a Mr. Atkins, is been quoted as having done another study and suggested that it may be only 25 or 30 per cent. Then in 2004 it is said in the document that a declaration was made

that it was more like 40 to 50 per cent. Whatever it is, even if it is only half of our water that is going to waste because of the failure to deal with the replacement of pipes, that is a matter of commonsense. Madam President, in a sense we have known a great deal of what is in this document for 30-plus years but we have simply not practiced it.

Madam President, I would hope that in many of these areas that the issue of replacing pipes that are either leaking or are danger of leaking badly, the issue of repairing or replacing trucks, rather than letting them rust at the side of the yard, all of these issues are a matter of commonsense, so that much of what is in the document is commonsense and I would hope that the inspiration provided by the document will lead to improved management that will help us to resolve many of the problems that we have to live with.

Madam President, I would emphasise, in conclusion, two of my personal hobbyhorses. I harvest water or I would not have garden. The harvesting of water in Barbados should be dealt with at the same level as the issue of solar heaters. We have had incentives to provide people with assistance in relation to the installation of solar water heaters which is ultimately a huge boom. We are given the data about how quickly you save money in terms of having a solar water heater installed. Well, water harvesting can be done at multiple levels. I believe the hotels are expected to harvest their water and there are examples of the Casaurina Hotel some 20 years ago with its water harvesting and its magnificent tropical gardens literally growing in sand on the beach was an example which should have been an example but would have been followed not just by other hotels but by the whole country.

Madam President, water harvesting can be done at two levels, it can with new houses be used to provide the flushing of toilets and so on, but essentially anyone can harvest water even if it is only with a drum from the valley gutter between two gable roofs of a small house, but with the harvesting of water, you can save an enormous quantity of the Barbados Water Authority's water and you can have a magnificent in which you can grow your fruit trees and vegetables, as well as ornamental plants. Madam President, water harvesting is something to my surprise has never been publicly sponsored, promoted, incentivised, talked about or made a part of our policy and that certainly should be a part of the greening of our economy.

Madam President, finally on the business of buildings, I would conclude once again the point that with all of our studies of the repairs of old buildings they come in at a cost invariably considerably less than that of replacing a building with new construction and this is a part of the green economy that is not specifically mentioned in the document but it should have been. The magnificent Chronic Disease Research Centre is a beautiful example on

the Ena Walters Roundabout; it was a building that was condemned by the Government and it has been completed at a cost of approximately one-third of the replacement of a building with that footprint. That is an aspect that, I think, like harvesting of the water, I did not find mentioned in the Green Economy Scoping Study. I would like to congratulate, as the Leader of Government Business did, all of those who took part in the Study and all of the contributions from some of the best brains in this aspect of Barbadian development. It has been a magnificent job, Madam President, and I commend it strongly. Thank you.

Madam PRESIDENT: Senator Boyce, you have the Floor.

Senator Hon. D.W. BOYCE: Thank you, Madam President. Let me also support the Resolution to accept this Scoping Study which has been commended to our consideration. Madam President, before I make my comments on the Scoping Study I just want to make a small correction to something that Senator Fraser mentioned just now when he said it was because of the low level of use of the high-rise parking facility that it was being turned into an office. That is not correct. That was not the reason for it being turned into an office. When that building was designed, it was designed to be a mix of retail and parking. There has not been any retail down there, and so we are turning the retail area into office space. It was really tailor-designed to have a mixed use. I do not want anyone to have the impression that we are just kind of taking a parking area and making it into offices for staff. It is really high-quality retail space that will be turned into the office facilities there.

Madam President, let me go to the Green Economy Scoping Study and suggest, I am sure we all agree, that this is but Step 1 in this process and that we will expect over time that we will go back at it again and again, seeing what we have achieved in terms of the ideas that have come out of this, and see what else we need to do and where else we need to go. As both Professor Senator Fraser and Leader, Senator McClean, have indicated, a lot of this Green Economy business starts from commonsense. If you would go back sometimes to the old days when we tried to make sure we used everything as totally as possible, we could perhaps start there. Madam President, we have first of all when we are dealing with the Green Economy to take into account the quantity of resources that we use for anything; whether it is electricity, water or food. Whatever it is, we have to take into account how much of a resource we use, and ask ourselves, "Are we using this resource as carefully as we ought to use it?" particularly where it is a resource whose resupply may not be certain, such as fossil fuel or water. Then we have to pay even more attention to how much of it we use. Madam President, we perhaps have not been sufficiently attuned in recent decades to this matter of using resources as carefully as we might use them. We go

for water and we tend not to pay too much attention to how carefully we use water. We go for electricity and we are not paying as much attention to using electricity as maybe we ought to pay to that. There are so many areas where we do not pay as much attention, such as in our use of petrol; therefore we do not organise our trips and our times so that we travel as carefully as we ought to. We have to start with that matter of trying to reduce how much of the resources of the earth we consume in any given measure.

What we, the Government, are trying to do in the area of energy is to reduce the use of electricity -- of energy really -- by about 30 per cent in the next decade or two. One way is by changing out lighting in the country and our streetlight project where we are going to change the streetlights to low-energy intensive lights. LED lighting is one of the ways to reduce the power or energy we use for streetlighting and the cost of that for Government. We are also going to try to get households to change out their lighting, and we have started with that with some giveaways which we have had a couple of times so people can change their lighting to more efficient lighting. We are going to have to be working much harder to get that exercise going right through the country, and get it going quickly. We are also going to be working on the matter of air-conditioning systems. I, myself, like certain people in here, like to open the window and let the breeze come through, but where I live I do not get too much noise or too much dust so I can do that. We do have to look at the type of refrigeration and air-conditioning we have in the country and make sure that what we are using is the most efficient one; so that we are not using resources only for the sake of using resources.

Madam President, some of you may know that I am sometimes what you may call a fiscal hawk, but the price mechanism is a wondrous thing sometimes. When the price of things increases, then we are a little bit more careful about how we use them; and when the prices are kept artificially low, then sometimes we do not care how much we deal with them. When you can afford to, you use the resources without consideration; when you cannot afford, you are a little bit more careful about it. I think part of this matter of trying to get people to think consciously and carefully about how much of the resources we use, is to make sure that those resources are priced to reflect the true value. Let people make the judgements for themselves.

Madam President, we have also started to do some work with the hoteliers. We have done some audits to see where they can improve their use of energy, and that is because we have been trying to get a fund going that will allow them to make the changes that they need to make in their operations to ensure that they use electricity and water more carefully; not only to save the resources but also to help them improve their competitive position and their cost of doing business, and therefore improve their financial

viability. Madam President, I think our first plank must be to reduce. A few decades ago we always used to say, "Reduce, re-use, recycle," and I think we have to remember some of those little things. Let us start with the reduction work that we have to do. Madam President, as we look at each sector of the economy, we have to pay attention to the environmental issues that occur in those sectors.

12.52 p.m.

Insert s10 juliette

Wednesday, December 07, 2016

Senator the Hon. D. W. BOYCE: If you have a landfill you are going to have leachate coming out of the waste and that leachate cannot be allowed to reach the water table so you got to do some treatment of that leachate so as to make sure that it is sufficiently clean that when it comes off from there it can be used gainfully in some area. We will still have residue left over there, so how do you take that residue and turn it into something useful, into energy or into the metals for road construction or what have you, and then what impact does that have on making sure that the limited amount of land that we have is put to the best use that it can be put to. Certainly, the landfill use cannot be the best use necessarily of the land we have in this small country, so that the issue of going green must not only deal with green as we know it or green as in trees or in energy but it also has to do with economy in the use of our land resources.

We remember times were when people often had their houses on relatively small plots of land and then we went to having houses on larger and larger lots. I am not raising an issue if the rest of the space is being used for something profitable like food but it is being used for grass and ornamental trees if you see the ornamental trees because we have a tremendous propensity not to plant trees. We love to plant grass but we do not plant any trees. We had this movement from smaller more appropriate house lots to larger house lots but not having on those lots the amount of food or the number of trees that we would have wanted in a country and that is what we need to focus attention on. Even in our land use policy, does it make sure that what you call the size for agricultural lot is sufficient that somebody can manage it? Right now the size of agricultural lots now require somebody to hire people into managing it except they are going to farm it fulltime themselves. I have a little agricultural lot and I have to hire people to do it because it is, even if it were half of that size, too big for me to work and still manage that as well. The issue of how we approach the ability to manage the resources that we have must also be part of the considerations for the green economy as we go forward.

Madam President, we are doing a lot of things already in the country in this area but there is a lot more to be done. Part of what we have to remember is that once we get started on greening the economy and making sure we are doing the right things we have to make sure that we spend a lot of effort in maintaining the operations of those things because it would not make sense to press ahead, for example, with an OTECH Plant or the improved treatment of our sewerage systems or with the Barbados Water Authority, for example, the pipes and so on, unless we are also going to build into our structures some arrangements that allow us to maintain the quality of those plants because the green economy is not only something that is emotional, it has to be driven by hard economics, it has to be able to pay for itself or to generate benefits in other areas that enable those areas to be able to pay for the green economy initiatives that are undertaken. We have to undertake them. We do not have a choice anymore.

A couple years ago oil prices had begun to come down. They got down into the mid-20s US dollars per barrel. This morning they are up in low 50s, US\$51 a barrel for the oil. I just say that because we have had a habit of start and stop when it comes to these environmental things. The fact of the matter is that we can no longer afford that starting and stopping, we have to get into it and stay at it otherwise we are going to lose the benefits. We cannot start to reclaim the coastline or preserve that coastline and stop. Once we start that process of reclaiming that coastline on the South Coast and West Coast we have to continue to do it, and having done the protection we have to make sure that we maintain that protection and that is one of the areas where we would need to have all of the money to do it so we will need to be able to recapture some of value that we create for other people. If I am going to create a wonderful beach for your property and maintain that wonderful beach for your property there are all sorts of systems in the world that exist to enable the Government to recapture some of the proceeds of that improved value in order to pay the capital cost of that work and in order to maintain the quality of the infrastructure that they have put there. These are some of the issues which, as we move on from this initial work and we begin to build out the various areas of it, we would have to spend some more time in looking at: How do we now take the wonderful ideas inside this document and implement them and make sure that they continue to be effective overtime, to make sure they are done in ways to enable us to afford them because sometimes we may say that we cannot not afford them but when you say that you have to ask yourselves the question: What do we have to drop to be able to afford these things. My suggestion is that we need to just think of ways that we can use these ideas to generate their own resources so that we are still able to meet the other important and pressing needs of the society.

Madam President, I would like to commend this Green Economy Scoping Study. I go the first step in this matter of taking a very programmatic approach and strategic approach to the greening the economy and look forward to the additional work that will come forward as we tackle each one of these areas identified inside this Report and I look forward to an expansion in this Report to cover those areas of the economy which have not benefitted from the analysis in this first Scoping Study.

Madam President, with those few words, let me commend this Resolution and signal my full acceptance in support for it.

I thank you.

SUSPENSION

Senator the Hon. Miss M. P. O. McCLEAN: Madam President, I beg to move that this Sitting be suspended for lunch until 2.00 p.m. today.

The question that the Sitting do now suspend until 2.30 p.m. was put and resolved in the affirmative without division and MADAM PRESIDENT suspended the Sitting accordingly.

RESUMPTION

MR. DEPUTY PRESIDENT: This Senate is resumed. Senator Ince, you have the Floor.

Senator J. INCE: Mr. Deputy President, I rise to support the Resolution that is before this Honourable Chamber that speaks to the Green Economy Scoping Study as a national document. Mr. Deputy President, the Green Economy Scoping Study looks at, and I term it the business plan for Barbados, one that looks at our short, medium and long term development. Mr. Deputy President, we have a Barbados definition of the Green Economy Scoping Study and simply put, that is looking to minimise, as I would put it, those environmental risk factors that may threaten the way we live. Mr. Deputy President, not only those environmental risk factors but also within the social risk factors and how best we can maintain our capital infrastructure. Sir, that is as simple as it may be.

Madam President, as I said, as a business plan for Barbados what do we speak about? Within the context this Administration clearly outlined that -- and we can go back to the principles of the Democratic Labour Party in 2008 where we say that Barbados is not just an economy, that it is also a society and that if we were to look at this Green Economy Scoping Study carefully, it embraces that principle. We then went on to say that the objectives of this Administration is to manage an economy that is socially balanced, economically viable, environmentally sound, and

characterised by good and transparent governance. Mr. Deputy President, this document embraces those principles, that are why I said it is a business plan for Barbados.

Mr. Deputy President, it not only speaks to the principles I have just outlined, but also to restructuring and diversifying the economy of Barbados in the areas of tourism when we look at what we have achieved to date and what we are still doing with our tourism plant. It also looks at the energy sector of Barbados, what we have achieved, what we are doing and what we are proposing to do for the future of Barbados. It also looks at the agricultural sector, the educational sector and many of those other sectors that are critical to the development of Barbados.

Mr. Deputy President, the Green Economy Scoping Study underlines what global economies are facing and we are facing challenging times when we look at our weather patterns. I am of the opinion that we are functioning in a time zone that is no longer 12 months a year. I do not have the empirical evidence to say that, neither do I have the scientific data but when I look at what is happening around us I am more convinced that instead of the year carrying 12 months, I am convinced that we are at 10-and-a-half months and that from a biblical perspective, the Lord said if we do not sharpen his days for the elect sake...

Mr. Speaker, the reason we have to take this Green Economy Scoping Study seriously, it seems to me that mango trees in Barbados grow year round, it seems as if you do not miss mango season; it seems like you do not miss the ackees, that when you look around you see that these things are happening. For example, when you look at St. Philip which is a dry parish, now I believe that St. Philip gets some of the most rain anywhere in Barbados. We were speaking about the fact that St. Philip gets rain almost every day and when speaking about rain, I mean heavy rains. Mr. Deputy President, people used to say that St. Philip was behind God's back, that it was dry and barren but now it is green. Therefore when you look at those changes of what is happening, even the changes as far as the temperatures are concerned, and we are having more earthquakes. What is the result of that? As a result it is of climate change and we have to put Barbados in a position that when these unforeseen circumstances which you cannot stop, but what we can do and what this document is seeking to do, is to create a blueprint where we can start to extract and to implement, because it makes no sense that we are have such a document and we are not implementing what is outlined. Mr. Deputy President, by the implementation process, it means that we can minimise the exposures to flooding, which is one of the challenges. Mr. Deputy President, for example, we had heavy rains about a week ago and persons complained about the levels of water that was experienced, but what is the challenge? One of the challenges is that we have so much land lying

idle that used to be sugar cane and many of those lands would have had water wells, natural drainage where when we had heavy rainfalls the rain would go to those wells. Mr. Deputy President, as a result of the acreage of abandoned lands that are no longer sugar, there is bush and most of the waterways are now blocked or covered in bush, the wells are not cleaned so that what would happen is that when you get excessive rains it runs on the road or it looks for different avenues, so that changes like these... and decisions must be made as to the fact that despite the land is owned by private persons sometimes a decision as to cleaning the wells, because we know that having those wells cleaned that water gets into the aquifers. Sometimes you have to make decisions, not necessarily clean up the land of the owners or they have to face a penalty somewhere along the line because without taking action that could have adverse reaction as far as protecting properties, lives and everything else is concerned.

Mr. Deputy President, what about the tourism sector? We now have all-year-round tourism and there are incentives, so that because of changing temperatures, because of changing conditions, you would find out that persons now look for different areas in which they can spend time with their families, that is why I said that the Green Economy Scoping Study is a business plan for Barbados.

Mr. Deputy President, one time we could easily say we have winter season and a summer season but we now have all-year-round tourism because of changes within the global environment. Let us look at St. Vincent which has experienced heavier rainfalls. It seems as if St. Vincent has had its fair share of unusual weather. Trinidad and Tobago has experienced flooding, earth tremors and earthquakes. There have been earthquakes in Italy and in other parts of the world, these are the types of things that we face, so that what is the impact? What is the impact not only as far as our social environment is concerned but what is the financial impact of the replacement and that is why I said the protection of capital, the protection of resources that is why it is critical and important that in Barbados our resources are our people? We have a capital infrastructure but at the end of the day when we look at what we call our natural resources we know that Barbados has the sun, lovely beaches and that over the years we have built a country on hard work, honesty and debt. Mr. Deputy President, it is now our duty to implement and to protect that resource, that is the people of Barbados because we have nothing else.

If we do not protect that resource through a Study like this, then all of what we have for agriculture, tourism and education is going to go to nothing if we do not implement. Mr. Deputy President, one of the things that I have stated over time is that what is challenging to Barbados is management and maintenance. We have not

been able to put management and maintenance systems in place, and it has nothing to do with any political party. For example, I have always said that Barbados does not need any more new roads. We do not. We have over 2 200 kilometres of road; 166 square miles of a country. We do not need any more new roads. What we need to do is to manage and maintain the existing network; that is what we need to do. You can get to any point of Barbados from anywhere. What has happened over the years is that we have never put what I call an effective management and maintenance system in place to deal with the road network of Barbados. When we look at the buildings -- maintenance of our old buildings -- we have never put a system in place to maintain many of what I would term the old architectural buildings, or what you may want to call the buildings of the 1950s and '60s. That is why if the history of Barbados is not recorded properly, we are going to find out that many of our buildings of a historic nature will be lost somewhere; and then when we want to do the research and find out about our history, we will not be able to do it.

I will give a typical example, when we speak to the Green Economy Scoping Study, which is a business plan; not only a business plan from an economic perspective but from a social and historical perspective, because if we are talking about tourism.... Mr. Deputy President, when I was studying for my degree at the college of insurance, we had to look at a project. I cannot forget this. There were Jamaicans in the class, and a young lady by the name of Janiece James did a piece on Jackie Opel. This girl never came to Barbados but she did a piece on Jackie Opel; where he was born and his music, because in Jamaica Jackie Opel is a musical icon. Jamaica has him in the libraries and so on. She got all of that. I was so embarrassed that I knew nothing about Jackie Opel, and here you had a lady from Jamaica who was able to give chapter and verse of Jackie Opel. She had never visited Barbados in her life. In fact, she lived in the United States from childhood. Her aunt took her to the United States. Janiece James; we were good friends. I cannot forget her. She was able to produce a document on Jackie Opel as a result of what the Jamaicans did - documented history -- and I from Barbados only knew a couple of lines about Jackie Opel. What I am saying is that this Scoping Study now gives us the opportunity to document and implement those things that are critical for Barbados, so that we can have a history of where we came from and where we are going as far as protecting our country and our resources -- our people -- is concerned.

Mr. Deputy President, the Scoping Study looks at the linkages with tourism, and with tourism and agriculture, and it speaks to what we can do; things we can do as far as organic farming is concerned. As I read the Document, there are many things in here that we in Barbados practised years ago, Mr. Deputy President. When you begin to read this Document, you will see that organic farming is nothing

new to Barbadians, but somehow we have allowed it to slip away from us. Look at our manufacturing sector and some of the things that were done before. For example, one now speaks of a free-range bird, but a free-range bird is a yardfowl; it is just that we give it a technical term. Mr. Deputy President, it is what we call a yardfowl which we feed the corn to, and there are some persons who are in the countryside and give them what we call corn. They eat corn and they eat grass. That is all it is. We put a fancy term to it. You fence them off and they come now in the form of red hens. They call them red hens; that is decent. They are now fenced - and I know places that are doing it and selling them to the hotels and restaurants -- but they eat the grass and you feed them on corn, or what we call scratch grain. In reality, it is a common yardfowl. What I am saying is that we have been practising these things. When we look at the health sector within the Green Economy Scoping Study, what I smile at is what we now call Omega 3 which persons are breaking down pharmacies and health stores to buy. Mr. Deputy President, our grandparents over the years did something called shark oil. They did not have the technology to carry it to the other level, but we know that when our grandparents did shark oil we could take.... We have medical doctors here, and if you put that bottle of shark oil in the corner of the house, for months, you could go back and open that bottle and the shark oil is still the same. We know that. However, what external forces did was to take that to another level, call it Omega 3 fish oil, and now we are breaking down the doors of the pharmacies and every place saying we need Omega this and health this and that, when it is the common shark oil or fish oil that our grandparents did in a buck pot.

When you look at the Green Economy Scoping Study, I took some time out to read it and, let me say, it is excellent work. I must praise the Minister, the persons at the University of the West Indies and all others involved. This really is a blueprint of Barbadian culture. Take some time out, Mr. Deputy President, and as you go through, it is a blueprint of Barbadian culture. We know that our parents before would give you a little spoonful of coconut oil. You would fry what you may remember as the 'Old Man Hat' and the cornmeal bakes with coconut oil. When you look at the whole Scoping Study, what does it entail? A blueprint for Barbados' development. However, we were told, again by external forces, that coconut oil was not good for you. Now you have something called coconut oil being made by countries where you do not even see a coconut tree; you have never seen a coconut tree, yet they are calling it Virgin Coconut Oil and selling it back to us for an arm and a leg, and you have Barbadians lining up. Mr. Deputy President, they are lining up buying coconut oil that our parents and grandparents made. That is the Barbados.

3.02 p.m.

Insert s15 juliette

Wednesday, December 07, 2016

Senator A. A. ADAMS: ...Susan Mahon a chapter in a book I read lately, she is involved with the Bellairs Research Institute, and the term she used really is a very key concept, she referred to it as environmental stewardship. Stewardship is a very important concept if you look at it from in biblical terms where man has been given stewardship of this earth. What it is saying is that you are accountable for what you have done for it, there is a time of reckoning, and therefore the concept of the responsible use of our natural environment through conservation and protection is how she tried to define this concept of environmental stewardship.

A major trust is to help to educate and sensitise Barbadians, old and young, poor and rich, why we should care for the environment, and the reason is simple. I started with this and I am going to mention it again, it is because our very existence depends on it because we just cannot survive without oxygen, without water or without food. All of these key essential elements come from the environment and if we really do not treat the environment properly, we find affixation, dehydration, starvation and ultimately death. Poor stewardship will lead to destruction and death but if we look after the environment properly it would lead to prosperity and wealth, so I thought I would want to bring those points out at this juncture.

Now, I want to say that since independence, that is going back to 1966, there is no doubt that we have gone a long way in the protection of the environment. We are not perfect, we have a lot of work to do still but Barbados has been sitting at the head table and has a very responsible position and key inputs in matters relating to the environment not only in Barbados but throughout the world. We have not only been sitting at the table but we have been actually doing a number of things and doing a number of them well to the extent that in the world we would be sitting around the one-third percentile group. Out of 150-odd countries Barbados would be in the one-third percentile group and that is a very commendable place to be for a country of our size. I think we are 59 in the Human Development Index and it is something of which we should justly be proud. That comes as a result of our life expectancy, our infant mortality rates and generally speaking our overall standard of living.

Now, I do not want to stress the point but it does mean that Barbados has been doing a number of things notwithstanding the criticisms that sometimes we justly deserve and sometimes not so justly deserve but when we balance it out and we look at our situation over a period of time we find that there are a number of things that we have been doing relatively well but as I said we still have quite a lot of work to do. There are some targets which the United Nations has set out to which we have committed ourselves.

The first is the reduction of carbon dioxides. Secondly, to reduce the ozone depletion of the ozone layer. Thirdly, to encourage the protection of natural areas such as our national parks and things of that nature. Fourthly, to improve access to fresh water; and fifthly, to improve our sanitation facilities. There is quite a bit of work to do in these areas but we have the assurance of the various authorities that the work is ongoing and we have to give a chance to have these things properly done, so the Barbadian people have been in the forefront.

If we go to 1992 and 1994 we find that the United Nations had their conferences, the Small Islands Developing States Conference in 1994 here in Barbados and I think the 1992 one was in Rio. It was interesting to note, I think, that in 1992 the Honourable Prime Minister of Barbados at the time Sir Lloyd Sandiford actually penned a poem the "Ode to the Environment", I think it was called. Some people kind of ridiculed it but the fact is that the international body hailed it as a great piece of work. I wrote a few of the stanzas down. The poem is called "Ode to the Environment". It says: The things are grand, the ends climacteric, so globally we must cooperate, share the cost proportionate, lest the globe itself disintegrate. In those stanzas there you find the notion of cooperation, you find the notion of cost and you find the notion of caring for the environment in a sustainable manner, and that, while some people were looking at it in a rather frivolous manner, has actually not only been embraced but accepted by the international community and therefore again we find that Barbados is in the forefront of leading the way being a pioneer in the area of the environment. The poem, as I said, calls for the sharing of the costs, it calls for cooperation and it calls for sustainable development policies to be followed, so Barbados is not a backwoodsman country in relation to the environment.

I want to make it very clear here that over the years on balance we have actually been a world leader in the field of environmental studies and so on. Our stewardship is there for all to see. I want however to caution that does not mean that we are to be complacent, that would be a mistake nor it does not mean that we should rest on our laurels or that we should even fight to maintain the status quo. We should in fact be looking to the next 50 years. In fact, this Study is coming on the cusps of our independence and we are not only looking backwards to say that we have done relatively well but we want to look forward and see how we can pivot the country to greater heights, so it is very, very important that we recognise these challenges and begin to deal with them.

Mr. Deputy President, in the year 2002 a Policy Paper was presented and then it was moved in the House in the year 2003, it had to do with our National Sustainable Development Policy. What did it seek to do? It sought to ensure that every individual Barbadian should benefit to the

maximum by ensuring that the environmental growth and development does not occur to the detriment of our ecosystem. It is very important that in our thrust to grow the economy and to develop the country, we have to be very careful not to rush ahead, as Senator Boyce has said, *festina lente*, we ought to make haste slowly, that in our thrust for example, for renewable energy we should not go ahead post haste and bring the national grid into disrepute and therefore affect the power of all the people. We need to do that in a responsible way, so that we do not create havoc in trying to move forward too fast.

Mr. Deputy President, that is in fact what the legislation was saying in 2003 and we are now building on that. Mr. Deputy President, therefore, put in simple terms it means that environment stewardship should inform all future projects, not some but all. Whether it is the building of a hotel, a sewerage project, an agricultural project or whatever, we should be considering the environment consequences of it and the level to which its sustainability is assured. Mr. Deputy President, I think that Barbadians are aware of that. I am sure that the various Governments have been aware of that, they have not been perfect but in every step that we go we find that these types of studies are done to ensure that the integrity of the environment is not brought into question. Mr. Deputy President, it therefore means that we should put some sustainable principles and these principles should be integrated into the developmental plan of Barbados.

Mr. Deputy President, in relation to land usage I supposed that within the last 20 to 25 years of our Independence that there has been many complaints about the use of land. It is something that we ought to look at. We find that in terms of the building of houses and other developments sometimes along the coast that sometimes we might not have done the right thing. The point about this is that apart from the fact that you might be looking for employment for the population, the point I really want to stress here is that the land to be used for the feeding of the population. We want to ensure that whatever happens, we want to have our land not only from the point of view of economic development but also from the point of view of our food security.

Mr. Deputy President, there are areas of the country sometimes that we do not bring into the picture and I would like to bring that area in, that is the East Coast of Barbados. This legislation in 2003 pointed specifically to the National Park which really stretches from the northern tip of St. Lucy all the way up to Consett Bay, St. Philip. It actually constitutes about one-seventh of the land mass of Barbados. It is a delicate area and therefore in terms of its development, we have to make sure that we preserve the natural and cultural heritage of the area and that we must always keep in mind the people who actually live and work in the area.

Mr. Deputy President, sometimes those things are not taken into consideration and therefore we want to make sure that the people who live and the people who work there are taken into consideration when any development is taking place.

Mr. Deputy President, for example, we take the mining area at Walkers, that is a key area. It came about, I believe when the expansion of the building in Barbados came about and the experts are saying to us that it is something at which we need to look and it is being looked at. Indeed, there is a plan afoot to reintegrate that area into the agricultural domain of the country and coconut trees, fat pork and cashews and so on are being planted there to encourage the habitat for wild life and things of that nature.

Mr. Deputy President, this project has also attracted the attention of the international community and so what we find in that Walkers sand dune area is a situation where international experts, local experts and the local community are all working together to reintegrate that area into the well-being of the Barbadian landscape. Therefore the mining activity will probably abate somewhat but what will take its place is a reintegration of that land mass. Mr. Deputy President, we find that included there would be:

- (1) a national park trail;
- (2) national park villages;
- (3) national park forest sites;
- (4) waterfront parks and the restoration of strategic areas where young people can go and do studies in the environment.

Mr. Speaker, so that the East Coast now can be looked upon as an area where Barbadians both young and old will be able to recreate. Also it can be looked at from an economic standpoint but a planned economic standpoint and so the integrity of the East Coast will be in place. Mr. Deputy President, we would be at the same time be concerned with the greening of that area, making sure that sustainable development really is interwoven or built into the key sectors of our national development. Mr. Deputy President, while we are doing that, we would also need to consider construction and transport to make sure that in the building of roads or in the transportation using the buses, *et cetera*, perhaps vehicles of a certain weight are not directed to go into that area, so that its integrity could be maintained. Mr. Deputy President, that notion of the plan from 2003 has come all the way now up into this Green Economy Scoping Study and we are very happy to know that both the Government and the University of the West Indies and the various other agencies are involved in the compilation of this plan about which we are talking.

Mr. DEPUTY PRESIDENT: The Honourable Member has five minutes left in which to conclude. Mr. Deputy President, in 1914, we had a very important person here in Barbados which highlights the importance of Barbados on the world scene, his name was Dr. Akeem Stynes, Executive Director of the United Nations Development Programme. He had a conference with the Right Honourable Prime Minister and he also addressed the Barbadian people, I think here in Independence Square, Bridgetown. It highlighted to the world the importance of Barbados in matters relating to the environment. He gave a speech there, and the speech was about the food security of Barbados, and it was a panel discussion as well. What is important is this: It was agreed by all concerned that if we do the right things here in Barbados, we will be able to support ourselves to a very high degree. In other words, if we follow the right steps, if we take the sustainable pathway, we are able in many of the areas to be self-sustaining in our food production. Therefore, the fact that experts can come here and let us know that is the case is, to my mind, extremely important. My time is going off a bit but I just want to say that the notion of where we want to be in the next 50 years is very important in relation to this Study. I also believe that in the area of renewable energy, if in the next 50 years Barbados does not reach that goal of being the greenest in the region, we will be among the greenest countries in the region; and our householders, businesspeople, particularly our hotels and Government buildings, should all within the next 50 years be able to have renewable energy to supply their energy needs and no longer have to rely on the use of fossil fuels which are dirty, which pollute the atmosphere and which bring all kinds of degradation to our society.

I just want to end in that area which has not been touched yet, and that is the air. I do not think we mentioned that in our discussion so far. An area that we really need to consider is how we are going to control the carbon dioxide emissions, which is a major problem in this country. It is a problem throughout the world, but those of us who travel, especially those who travel a lot, would tend to agree that we are pretty low in terms of the control of the emissions from vehicles and so on. The experts in the world are telling us that many millions of people's lives are shortened as a result of the noxious fumes coming from these vehicles that are unregulated. In our case, I want to point to public transport; I do not want to leave that out. I am really looking at the ZRs and minibuses and indeed other private vehicles. They seem to almost have a licence to kill, because every single day if you are on the road or at the bus-stop, you are really blown away by these noxious fumes which, once they get into your body, are extremely difficult to deal with. I believe that is an area which we ought to look at, and although it has not been mentioned before, I am sure that it is part and parcel of the Study and is an area which we feel this Chamber and other authorities ought to discuss very seriously and come up with a

solution. With those few words, I thank you, Mr. Deputy President.

Mr. DEPUTY PRESIDENT: Senator Hunte.

Senator R.A. HUNTE: Thank you very much, Mr. Deputy President. I just want to express my support for the Document before us, which we are asked to give our support to and pass in this Honourable Chamber. Mr. Deputy President, there are some things that inspire you and encourage you to look at, read, and deal with in whatever capacity you intend to. I heard a spokesman from elsewhere referring to this Document as outdated. I wanted to hear from that person the reason why the statement was made, and I never heard it, but I will tell you that it made me look at this Document. Although I would have done that eventually, knowing obviously that we had to debate it here, I really read parts of it; of course, not all of it yet. This is one of the most well put-together, to use simple language, studies and a Document of our environment and our challenges. There are proposals as well as comments that I have taken an interest in for quite some time. I want to start by congratulating all of those persons who put their heads together and prepared this Document for the Government and people of Barbados, and -- I do not know if it will happen in my lifetime -- who will implement a number of those recommendations in this Document. It really is a comprehensive Document on the challenges that we are having and on those we expect to have in the future as far as our lives and development is concerned.

Mr. Deputy President, there are one or two things that bothered me, though, and they relate to the challenges of climate change, et cetera. There recently was a large conference in France involving the whole world, so to speak, and of course it looked and eventually agreed with some of the steps to be taken in respect of the changes which we are going to have and do have right now facing us as far as the climate is concerned. What bothers me is that the President-elect of the world's largest economy, the United States of America which has just gone through an election, believes and has advocated that climate change is a hoax, and it is being promoted by China. Now, that is a concern of ours and it has to be, but here it is that at the centre of the developed world, the person who is about to take charge in that country has this view. It is a very serious thing that we have to look at. Looking at what has been put together here, you can get that comment.

I want to read Achim Steiner, who is of course the Executive Director of the United Nations Environmental Programme (UNEP). I think he said in this Document that the Green Economy offered Small Island Developing States (SIDS) the chance to better deal with the impact of climate change, manage natural capital, protect fragile ecosystems, create green jobs and achieve sustainable development. He went on, "Home, with all of the countries

of the Small Island Developing States, to 62.3 million people, the world's 52 SIDS are custodians to 30 per cent of the world's 50 largest exclusive economic zones and play an important role in protecting the oceans. SIDS contribute little to climate change; little means less than one per cent of global greenhouse gases."

3.41 p.m.

Insert s19 juliette

Wednesday, December 07, 2016

Senator R. A. HUNTE: ...Government would have to continue to do it for several years to come unless there are very, very, very great alternatives to the sugar industry in this country.

I talked about the legislation and the incentives that were provided for the agricultural industry. What has happened today? Something seemed to have gone wrong, wrong, wrong. This is not attributed to any one political party at all. Some should have acted maybe faster than others but that is not the point, the point is that we have allowed this sort of situation to develop to a point where more or less now the country is being embarrassed by our lack of implementation of what we should have... No matter how small or how measurable, we have allowed a couple of people to have raped this country.

I have said in here already and I will repeat it again, that there is absolutely no reason after employing all of those persons that helped to build the Barbados Shipping and Trading that every portfolio in the Barbados Shipping and Trading should have been sold off. I know a person whose name I am not going to call, who cried who had shares in the Barbados Shipping and Trading but responsible for what happened eventually to Barbados Shipping and Trading. It was a large operation. It was a conglomerate in this country. I do not think there is any one person who have could brought it but there are portfolios within that company that could have been sold off to some of those workers because they had shares in it. The Barbados Shipping and Trading was made up of a lot of different portfolios but it was sold lock, stock and barrel to a Trinidadian concern and they in turn started selling off certain areas or certain portfolios piece by piece to supermarket businesses and hotel businesses because they could not get a lot it run. You could tell me that some of those workers could not have bought out Almond Bay Hotel or some of them could not have bought off quite a few of those portfolios within those departments that they have worked for years and built, but no selfishness again.

There are very few European population in this country that own certain types of businesses, that is a fact of life. When you are exercising and running you does hear

a lot of things because when people are exercising a lot of things does come out of their mouth. Some of them do not look like me but they spoke about we could have done this, this could have happened, this should not have happened, and that is where we are at today but tradition dies extremely hard and because a lot of us do not have confidence in our own selves and we prefer to have all of these large savings of money in the banks so to speak rather than invest in areas or be allowed to invest in areas that those persons who work in, some of these areas that helped to provide some of the great profits that some of those businesses enjoyed... Do not tell me they could not do it. It could have been done but that is our status of life. We have sold out lock, stock and barrel and now we are at the mercy of people who at one time we were above in a lot of things, intelligence, et cetera and all of these things but this is the level at which we are at.

Another of the industries that a lot of people did not pay attention to in the way it should have is fisheries. I am going to read some information here about the value of the fishing industry. I did not know it before. Of course, these statistics were up to 2007. I will read it. The fishing industry serves as an important social safety net providing work for those unable to find other employment and supplements the income of those employed in other activities. The total value of local fisheries was estimated at about US\$25 million in 2006 and includes both the value of landing your fish and the onshore value-added components such as the boning, the filleting and the processing the fish, et cetera. All of that made up the assets valued at some US\$25 million, and that valuation was carried out in 2006. I did not know that the fishing industry had worth so much and that is why I compliment those who put this Study together and it forced me to read it when I heard one person who talks a lot of foolishness sometimes...

Asides.

Senator R. A. HUNTE: I am referring to no one in this Chamber, Mr. Deputy President. The words are outdated. I do not know. I see that this document came on stream in June 2014 and was reviewed in January of 2016. Mr. Deputy President, no matter what, the point is that information is in here. I have not fully read it yet but I will because I had to read this document put together by these brilliant sons of the soil in their own capacity or representing organisations. This is a real fact document with the exceptions, which one other person might have drawn, that is not included, but you cannot include everything. This is about 99.9 per cent of what Barbados is like yesterday, today and should be put right tomorrow, and that is why at some point the money has to be found to implement some of these programmes.

The challenges I have heard the engineers at Barbados Water Authority talking about that should be done now is going to cost about \$250 billion as estimated to put things right. To put our sewerage areas right, I cannot put it how the engineers would put it, and the areas dealing with our water in terms of production and sewerage, et cetera is going to cost us but we have to find the money. I will give you an example of when I was going down Roebuck Street some years ago, this is about 10 years now. This old lady in front of Hill's Supermarket was complaining about oh these feet and a lady who was not old said to her: "How old are you now" and she said: "78", and the lady said: "but cud dear you mean for 78 years they carry you on you do not expect they are going to hurt now". That is just like the old pipes that we got. They did their job for nearly 100 years. They run all across cane grounds, as I boy I know, and all through Bank Hall and all sorts of things under houses and canals, do you expect that they are not going to give trouble now. Why should we? Mr. Deputy President, I think that it is unfortunate sometimes that people who wish to manage the country, in their capacity as politicians, will bring wrath upon themselves because they know quite well that there is no one person or Government who could be blamed for some of the challenges that we have, that is natural, that is the works of God. Somebody would probably want to blame Prime Minister Stuart for rains that fell last Tuesday, but maybe the country has been suffering so long that if he called for the rain to fall, then maybe he would have done a good job.

Mr. Deputy President, we have a tendency in Barbados for blaming certain people for every ill, or for they perceive to be an ill in this country, I do not go down that road, I have passed that sort of thing a long time ago. I have been around politics for too long. I attribute blame where it needs to be attributed but not stupidly or foolishly because I know differently, but sometimes people in public life bring all of these things upon themselves and then when they get into the position they have a rearguard action because they have to fight to keep it off. At this point I would like to tell people to buy a book that was recently edited by Senator Carmichael, a very comprehensive piece of work that has a history as well. Also, one of the contributors to that is also my good friend, Senator Alwin Adams. I want people to read this material. Senator Ince always says that if you want to hide something from a Bajan, then you must put it in a book. Well, I want to tell them now to read those books.

I went to Senator Carmichael's book launch, also to Sir Harold Hoyte's book launch. I have contributed to that in a way too but I am not here selling those points, the point is that these are people who you have to give credit, those persons who sit down and create information about our country, particularly our country, we have to read and also encourage our children to read them, instead of giving

them a toy gun. This is so important. I do a lot more reading now than I used to do when I was growing up. I was not interested, quite frankly, I could not sit down and read a novel like other people but in the last 10, 15 or 20 years I have done a lot more reading because reading is important and once you have reached this stage in life you have to make sure that your t's are crossed and your i's are dotted. I encourage people to read these publications that are done by some of our local people. We have produced brilliant people in this country but we do not always give them credit.

Mr. Deputy President, when we talk about our road network we might only talk about the potholes, and maybe it is the kind of material that they are using. As soon as the rain sets up, you see potholes in the road, that that is not anything for which to blame a politician. I remember the days of the steamroller, the gravel and the tar. The trucks would come and put down some stone, the steamroller would then roll it. Let me tell you, that road stayed in proper condition for a long time, but maybe it is the kind of bitumen that we are using now. I do now, that is not an area where I have any experience, but as soon as the rain sets up now there are potholes in the road. I myself have suffered some damage as well, but this is not where you apportion blame to a Government or a Prime Minister where if there is a pothole in White Park Road the Right Honourable Prime Minister must run down there as though he can get it fixed, or if there is a pothole in Bank Hall, in Bayland or on the East Coast road that the Right Honourable Prime Minister must run out there and get it fixed. Mr. Deputy President, that kind of foolish politics is done with every sense, come and talk to the people.

Mr. Deputy President, the politicians who went to St. Andrew and St. Joseph when those persons were experiencing water problems did not carry not even a bottle of water. I have not seen a fellow carrying a bottle of water in their cars, not one, and I get a newspaper every day, but all they were saying was that the Right Honourable Prime Minister should come and talk to the people, yet these people never took along one bottle of water with them. I thought that that foolish kind of politics was done with a long time ago, all they had to do was to put a few bottles of water into their cars, station wagon or whatever vehicle that they had and give them out to people. Instead not even one bottle of water was given away by any of the politicians who went around the country quarrelling.

Mr. DEPUTY PRESIDENT: The Honourable Member has five minutes left in which to conclude.

Senator the Hon. D. W. BOYCE: Mr. Deputy President, Barbados' road network consists of more than 1 600 kms of public paved roads. I will go on to mention the Ports and so on but I will mention particularly the roads under "Transportation". Mr. Deputy President, whether or

not there are potholes, that is the road networks that we have. Mr. Deputy President, the kind of vehicles that are on the road now, the eight-wheelers, ten-wheelers and all kinds of vehicles, we did not have 15, 20, 30 or 40 years ago. All of those things have to be taken into consideration. I see sometimes that even tractors or caterpillars ride across the well-paved roads and we know what damage they can do to our roads.

Mr. Deputy President, things have changed and have changed dramatically and so we are not apportioning blame here, this is our country, we have to do things to maintain it and we have to source the money in some form or fashion. Mr. Deputy President, I am much obliged.

SENATOR CAROL Lady HAYNES: Mr. Deputy President, I rise to join my colleagues in congratulating the stakeholders who are involved in the production of this Green Economy Scoping Study. Some year ago I read that it was meant to be a preliminary assessment, I really have seen few documents that are as informative as this, the scope of it, the complexity of it and yet how simple it really makes all the information that is in there and so I would like to join in congratulating the Government, the University of the West Indies, the United Nations Environmental Programme and all the non-governmental organisations stakeholders who have put this together.

Mr. Deputy President, I would like to thank the Leader of the Senate for her introduction. The Honourable Member has put my mind at ease with a few things said. First of all, the Honourable Member said that the Resolution refers to it as a national information document, that is really the kind of context in which I think we need to be considering this, for it is certainly a national document. The Honourable Member referred to it as a reference document and I can specifically say that it is not something that is going to fall somewhere in a ministry because that is certainly one of my main concerns, that we do so much good work and much of it gets shelved and never sees the light of day.

Mr. Deputy President, the Honourable Member also asked the question, who should read the document and why and I would like to join with my colleagues who have said that everyone should read this document. I know it is somewhere in the document where it we need to find a way, whether it is through the Government Information Service, the stakeholders or all of those things, to really ensure that this Document is in our schools, our educational system, our labour unions, and in every corridor where Barbadians gather because this is truly an important Document. It is a Document for the future, and it is also an easy document to comprehend, because so many of these documents get to be so intricate that at the end of them, you are not sure exactly that you got it all together. I also want to thank the Leader of the Senate for pointing us to the

actions that will be taken and that will come out of this, whether they are domestic, regional or international. I think that, of course, is very important.

In the concept of a Green Economy, it reads that at its core, a Green Economy still has to be understood as an economic system and one that is compatible with the natural environment, environmentally friendly, ecological and, as added by some, socially just. Achim Steiner, the Executive Director of the United Nations Environmental Programme (UNEP), has been quoted a few times in here this afternoon, but he says in the foreword that the Document examines how a developing country can strengthen its policies and harness its investments to move towards a low-carbon, resource-efficient and sustainable economy while enhancing social equity and environmental protection. That, of course, resonates with Government's commitment to be a socially balanced, economical viable and environmentally sound society. The Prime Minister, also in this Document, singled out three things which he thought would be critical to this Green Economy debate; firstly recognising our structural vulnerabilities and those are economic vulnerabilities, secondly creating a model to further realise our sustainable development aspirations, and thirdly to create an institutional platform to enable us to participate in innovative partnerships. I wanted to look a little bit at the creation of the models and the institutional platform but I just want to pause a minute here, Sir, to recognise our young and newest United States ambassador, Ambassador Selwyn Hart. I think the timing of this appointment as our Ambassador to the United States and the Permanent Representative to the Organisation of American States (OAS) could not be better. As I think everyone in here knows, he has been intricately involved with climate change. He is the chief climate change negotiator for Barbados, and over the past year was the director of the United Nations' Secretary General's climate change support team. This is a fine young man, and it certainly shows the commitment of our Government to climate change at the highest level. Mr. Deputy President, I have occasionally listened to call-in programmes, usually when I am driving, and of course I read the print media, and I have been very mindful on several occasions as I hear references to the Senate as a talk shop, as an anachronism, and as a waste of time and of taxpayers' money. It never bothered me particularly before, Sir, but as I now sit here it is of particular concern to me; and so as I looked at this Document, I said I am trying to look at it from a perspective of policy and what do we take out of this Document in terms of policies. Have we in fact enacted all the policies that we need to enact in order to make this Document relevant? The Document notes that it is not automatic that a Green Economy could contribute to social goals without specific policies and institutions. Sir, I went through a few areas of the Document, and first of all, on Page 6 in relation to building and housing policies, it refers to the constraints in relation to greening industry in regard

to housing, and the challenges to the implementation of renewable technologies that were listed previously. Then it says that today two other challenges have surfaced; firstly the perception by the industry managers that low-cost housing is in dire conflict with sustainable housing, and secondly the cultural preference for detached housing. It reads: "To address challenges, stakeholders felt that training programmes to further enhance the expertise of local building professionals, including architects, engineers and contractors, should be developed and an over-arching policy framework be formulated." Sir, I think that is one thing I would like to flag as a policy area. As it relates to transportation, it says on Page 7: "Greening the transport sector should address existing issues in relation to emissions without harming economic activity. Green policies that support transportation should integrate a sustainable transportation policy into the overall planning process for this sector."

That is transportation. Tourism is on Page 9,

and there are listed a number of formal documents and policies in tourism, but it does say:

"The creation of business models for sustainable agro-tourism and the adoption of internationally recognised production standards for agricultural products are equally critical."

There is another area where we need to be looking at business models.

Under 'Green Transportation' on Page 51, it says:

"It is clear from this that the role of the public sector will be key in not just providing leadership but also in setting policy framework, putting in place incentivising mechanisms and monitoring processes. Furthermore, green land use policies should be complemented by a green approach to the built environment, whereby features such as prioritising the minimisation of resources and existing efforts by indicating a plan to lower the embodied energy of materials used in construction, as well as of the finished building, and to use materials from sustainable resources and re-use materials, becomes a prerequisite for new construction. At the same time, policies should be developed to incentivise retrofitting of the existing built environment so that there is a move towards upholding of the same standards of the resources and efficiency as for new building."

Finally, as it relates to the development access and transfer of clean technology, it says:

"The creation of rainwater harvesting (which Senator Fraser spoke about), waste water treatment systems and the

removal of barriers to their adoption would facilitate the transfer of clean technology."

Sir, I just want to flag a few policy areas which the Document commits to in the spirit of what our Leader has said; that this is going to be a living Document and not something that just gets shelved after excellent work. I would hope that these policies would be actively pursued. Also in this Document, Sir, there are at the end of every section some key messages, and again, so as not to be totally tiresome I am just going to flag one or two; but I think it is important that we are not a talk shop and that, in dealing with issues, we need to be ensuring that what we say is going to be done actually happens. On Page 96 which are the key messages for building and housing, two of them struck me, including the one that reads:

"Investments are needed in training programmes for built environment professionals and renewable energy technologies, accompanied by an over-arching policy framework."

Secondly: "The country requires a strategy and policy for ongoing education, outreach and information sharing in order to encourage behavioural changes in the areas of re-use and recycling in the industry. Given the island's high literacy rate, such a strategy should be highly effective."

4.20 p.m.

Insert s23 juliette

Wednesday, December 07, 2016

Senator Miss V. A. G. De PEIZA: ...recommend the document as pertinent reading for all persons who have a concern about the future of Barbados, but then there are a few issues that I did not see addressed in the document maybe because they are not relevant or maybe because they are but simply were not considered, and so I wish to raise a few as my contribution to the deliberation today.

I wish to start with water. It is very topical. Just last week we had issues continuing into this and there is a perennial refrain calling for the harvesting of water. It was said in here today that householders can collect the runoffs from their roofs and use it for watering their garden but what of persons who do not have extensive gardens or what of persons like myself who live in an area with high rainfall in any event so the water collected is not effectively used for watering gardens. What do we do with the water that we harvest? This is not to say that it is not a brilliant suggestion. You just need to harvest it with something in mind. Can I sell it back to the Barbados Water Authority in a similar way that if I generate electricity that I can sell it back to the Barbados Light and Power Company Limited?

Has that been considered? Is this something that would be viable for us so that we depend on something other than ground water for our water supply? Can I retrofit my home so that I can use the water collected in my bathroom? Are there incentives so that householders actually want to move in that direction? These are aspects of a greening of an economy that we need to consider.

We need to think outside the box and find ways to use what we have, come up with solutions that are ours that addressed the problems that we have. It is something more than watering our gardens. It is something more that we need to be thinking of to do with this great resource that we have falling out of the sky so that we do not have to wait on the six-weeks cycle that it takes for it to pour into our aquifers and get pumped back out. What can we do with our water? It has more to do with as well with what we collect domestically.

The nature of our Scotland District means that the water does not flow in, it flows on and out to the sea, so what is the Scotland District good for for us in terms of the collection of water. This is water that is already on the surface. How can we harvest that? I say again I am not of a scientific mind but I am throwing things out there so that those who are of a scientific mind can discuss, deliberate and dismiss if necessary but find solutions that work for our country. It is not just the Scotland District. We also have the Graeme Hall area which is highly salient but is water. How can we find that balance between our environment and our need for development and our growing need for water?

Despite the fact that our growth rate population-wise is dropping our demand for water is increasing so we have to start thinking creatively about how we find water in Barbados that we can put to use. It need not be potable water, it just needs to be usable water, water for agriculture and water in our toilets not just water to drink. How do we find water? That is a question that I am throwing out to the country so that answers can come filtering back and we can find solutions in the short, medium and not so much the long term to address these issues.

We also have our gullies. How can we use our gullies? Right now they are used again as catchments for water to filter down but is there a way that we can use our gullies. I do not know the answer it is just a question in my head. Can we do these things? What about our rugged northern and eastern coasts? Is there a way that we can utilise the obvious energy that is out there for the benefit of our country? That one is not a novel idea but is it viable for Barbados? Have we tested it? Have we studied it, and if so, when are we going to get to that point. All of these are things that are part of an evolving green economy that rushed through my head.

I am sure that there are more ideas besides the ones that I can think of that others have and just need a forum. I have in here to lend my voice but others may need somewhere else as a forum, but as a country let this be a springboard for the ideas to take us forward greening our economy.

I take note as well of the provisions in relation to our transport. Our fuel bill is ridiculously high. We acknowledge that. We also acknowledge that one of the side effects of the increasing standard of living is that there is a desire for transport so we now have to reprogramme the minds of our people as to what they actually expect out of transport. The first step would be to give them a transportation system on which they can rely so that they are comfortable resting down their vehicles and using public transport because they know that they cannot only get to work but get to work on time and not in a rumpled and grumpy manner that leave them willing to work. I do believe that the integrated transportation system that we are testing, I believe it is still in the pilot phase right now, would go some way to addressing that problem, but what about our water?

Once again we are an island surrounded by water, why have we not used our sea as a means of transport even if it is only during the peak hours. Again in my head, I see water taxis from Six Men's to Bridgetown and from Silver Sands to Bridgetown stopping at strategic points along the way. It need not be any other time but at peak time but it would take some stress off of our roads and it would be a most scenic and relaxing way to get to town. It could dock right here in the centre of Bridgetown. Why are we not thinking of these things and having them as a plan for our short to medium term? Again, I am not focussing on the long term because our problems exist now. Can we have that up for discussion so that we know that it works or it does not work? We would never ever get to that point if we do not discuss it as a country.

I can even see its potential for tourism development because during the off peak hours a relaxing trip down the coast by tourists is for them another new feature and something else to do in Barbados and for Barbadians a source of income. These are ideas that I am laying on the table in the hope that someone would pick up and run with.

I also have views in relation to our agriculture. Now, we need to get back to eating our own food. The way to do that is to grow our own food because if we are not producing it it is pointless saying that we want to go back to eating our own food, it has not only to start at a production level but at an educational level. Let us get macaroni pie out of our thoughts. What ingredient in macaroni pie is made in Barbados? Why do we think that macaroni pie is our dish? What is it about macaroni pie that makes us think that it is our dish, except the fact that we

have perfected the making of it. Where are our eddoes and cassava, so that we can make the flour and use that instead of importing wheat flour, so that we can get back to making the cassava hats that Senator Ince spoke about? Why are we not cultivating those as industries, because manufacturing is a way to get the entrepreneurial spirit moving, to get the job numbers up, all at the same time promoting our green economy? Madam President, breadfruit trees grow wild in Barbados, where are the byproducts coming from Barbados in relation to breadfruits? Madam President, there is also fishing, we depend heavily on fishing boats going out and bringing in fish. Has anyone ever considered fish farming, simply by making the fish tanks in the ocean itself, so that you have control over what is produced and that we would know how to control depleting stock, so that we could stop having little flying fishlets on our plates and have full sized flying fish again, like I remember? Madam President, if we can have these ideas not just in my head but discussed somewhere so that we can reach solutions... Madam President, it may not be the ones that I come up with, but having the discussion so that we move beyond talking about it and getting some action.

Madam President, we have spoken about greenhouse farming and hydroponics for years, we need to get serious about our agriculture. What about homegrown fertilizers? Not just the animals but we had sargassum seaweed all of about Barbados, was its potential in anyway exploited? Did we see if there was anything that could grow in the salt conditions that would be obviously absorbed by the seaweed or if it is that there was a way to remove the salt, leaving the vegetable matter that could decompose for the benefit of our agriculture? Madam President, these are just thoughts for the time being, so that we can get moving towards an actual green economy and not just a green economy on paper. Madam President, I want to take a pause to tip my hat to my former colleague from Harrison College, Selwyn Harte, for blazing a trail on behalf of not just Barbados but the entire world in terms of how we view climate change and how we can make it work for us, because that is important, how do we make what we have work for us. That is how you get the balance between our development and our economy, it is not that you want one to be viewed as having greater potential than the other but to find that happy medium, that balance between the two.

Madam President, that brings me to the last sector I wish to discuss. I am dealing with it last because it is a topic that is continually contentious. What are we going to do about our garbage? Again, the first thing that we need to do in Barbados is to stop thinking about garbage as musty, smelly and that we do not wish to touch it, garbage is business, garbage is potential, garbage is more than getting twenty cents for a plastic bottle. Why are we in Barbados not making something from those plastic bottles? Why were instead exporting them? Why can we not be the ones

having the initiative? Why are our old tyres not being transformed into some usable material here in Barbados? As simple as fine-stripping it to make playground soft material for landing, to more convoluted as transforming it into asphalt for roads, and anything else between? Madam President, those are just the ones that I have researched? What can we do with our plastics besides charging for the use of a plastic bag? Madam President, this is not a bad idea because having been given months' notice, I have started collecting my bags that I would use instead and I would suggest that the rest of Barbados would do the same. However, plastics being here and literally being here to stay, because they do not biodegrade in any significant way, what are we going to do with them to make it work for our economy?

Madam President, that is all part of having a green economy, the things that we have we find a way to make use of and not just empty platitudes like "reduce, reuse, and recycle". Madam President, it reminds me of the 1980s and 1990s when the empty platitudes were "just say no to drugs" which meant nothing. If you do not follow it up with something, if you do not have more going behind it, it is just an empty platitude. What are we going to do with the things? How are we going to reuse them? How are we going to reduce them? How are we going to recycle them? How are we not just going to collect them at a point and ship them overseas but are we going to be finding work for Barbadians to do by making something out of them? How do we make that happen?

Madam President, may I suggest that in finding that balance between development and preservation that we start with education. Madam President, I do not just mean telling children to "reduce, reuse, and recycle." I remember when my daughter first started school she made a persistent pest of herself with everything in the house that she insisted must be reduced, reused and recycled, without any knowledge at all as to how it was to be done. She was just insisting that we were not to throw away things, but without knowing further what could be done with them. It was empty education. Can we have a focus in our education, first to teach our children to think and not just to follow, because we will need that lateral thinking to develop the entrepreneurial spirit, to come up with the solutions, which brings me then to the need to fund their ideas? Ma'am, perhaps the time has come for all our scholarships to be targeted scholarships, that we know what we want and we are prepared to fund that, that we train the minds of our children to think outside of what is traditional. I know that sounds weird coming from someone who does law but understanding that the country has moved beyond that point and needs specialist attention in particular areas.

Can we focus our educational financial drive towards getting Barbados to the point that it needs to be, in moving towards a green economy?

Madam President, this study for me is a start, it has triggered a lot of questions for me and I hope it does the same for the rest of the country and that having had questions, that we move towards finding answers so that we can get the solutions necessary to take Barbados forward in some meaningful way and not just with platitudes but with a different attitude and a mind set to do, so that we can leave a Barbados so much better for the next generation. I thank you.

MADAM PRESIDENT: Senator Walcott, you have the Floor.

Senator Dr. J.X. WALCOTT: Thank you, Madam President. I rise with pleasure to support this Resolution regarding the Green Economy Scoping Study for Barbados and, like all the previous speakers, I think it is extremely useful. It is a Document that needs to be shared with all Barbadians, and I think it is a very important reference Document. I hope that it will be utilised in our future development as a country, recognising of course that there are a number of initiatives and activities that have been going on in the various sectors, as mentioned in the Report; so that we are on our way in terms of making Barbados a Green Economy, as envisaged back in 2006-2007 when this initiative was started. As the Document says, it is a Study which focuses on the potential for greening of five key sectors in Barbados. These are agriculture, fisheries, tourism, housing and building, and transportation. The Study addresses four very important cost-cutting issues: water, energy, waste, and land use. I, like my predecessor, will just briefly mention some of my thoughts and ideas about some of these various sectors, and indeed the cross-cutting issues, and try to be as non-political as I possibly can this evening, recognising the time of the year it is. In the area of agriculture, it speaks to improvements that can be done. It speaks to the work that has been done in terms of organic farming, hydroponics, et cetera. We all know that a lot of work has been done over the years in these areas, and the recurring factor seems to be the issue of access to incentives. Governments over the years have passed legislation and made it possible for certain incentives to encourage persons to indulge in organic farming and so on, but repeatedly the issue is in terms of access to these funds and these grants. These are areas which, in going forward, we will have to look at in terms of accessibility. Regarding the use of water and the drip system, everyone of course is onto drip irrigation and, as the Document correctly states, a number of persons do not understand in terms of the water-to-plant and the growth cycle of the various plants when you need water and when you do not need so much water. A lot of persons with the drip system just use the drip continuously. Obviously, more technical expertise, advice and training in these areas will be necessary. I agree with Senator DePeiza in terms of utilising our agricultural produce such as in breadfruit chips. Years ago, we had instant yam, and Barbados is

known for its yam and instant yam, but I believe that is a thing of the past. As we move forward, this is something that we should have been pushing -- instant yam, when speak about the European Partnership Agreement (EPA) -- in terms of exportation of something like this to the European Union. We sadly have fallen by the wayside in this regard, and certainly going forward efforts need to be made in terms of regenerating these activities in agriculture. In terms of fisheries, I smiled when I read the Document in relation to the water wastage; because often when you go to the fish markets, especially in Oistins and Bridgetown, you see water running perennially from the time the markets open until hours later. It is good that there is an instrument to use infra-red sensors in some of these faucets in an effort to really reduce the wastage of water in those facilities. An issue of concern has been the fish offal and its disposal. When I was Minister of Health, we had issues with this in terms of two to three tonnes of fish offal going to Vaucuse on a daily basis, and it was felt by a number of persons in the Ministry that this could have been used for better purposes; such as fertiliser, making pellets for dog food or cat food, but more importantly converting it for composting and for biomass which could be used for replenishing soils. When Government speaks about energy, it could also be used as a source of energy generation from biomass. I think that we really need to look at the utilisation of fish offal. Of course, Senator DePeiza mentioned fish farming, and this is not something that has not been talked about. I remember sitting in a Cabinet where there was a Paper on fishing policy and it spoke, to a large extent, about the need for fish farming off the coast of Barbados. It also spoke of the need to improve the market facilities and the phytosanitary conditions in the markets, in an effort again not only to process fish for Barbadians but to export to Europe and other countries. This, again, is an initiative that will have to be taken up. I believe this has also fallen, not by the wayside but I believe in terms of the economic realities facing the country where perhaps it has been sidelined, but I hope not forgotten. Obviously there is a fishing agreement with Trinidad and Tobago, but there is a need for us to look at fishing agreements with other countries nearby and closer to us as we proceed in terms of developing our fisheries industry. In terms of tourism, this is probably one of the areas where a lot of progress has been made by the private sector in a number of hotels in terms of greening their facilities, having on-site waste management facilities and packaged sewage treatment facilities. A lot of them use the waste water for watering the gardens and indeed for flushing toilets and so on. Certainly, they have benefited from the greening initiatives which have been offered by the Government to the tourism sector. There needs, however, to be enhanced activity by the Coastal Zone Management Unit. If I remember correctly, there was a proposal for reef regeneration and rehabilitation, and this had received the green light from the Ministry of Tourism and other stakeholders in the sector, such as hoteliers and the fisher folk. I do not want to

say that it has rested at the Ministry of the Environment for any particular reason, but that seems to be a sticking point in terms of that reef regeneration project, which is extremely important in terms of preserving our marine environment. In addition, there is a need to clean up our coastline, and this is not a Government initiative which is needed. Perhaps, similar to how we attempted the holding of hands around Barbados, an initiative is needed perhaps to help persons go out on a Saturday morning all around Barbados with garbage bags and pick up garbage on the coastline. Aside.

Senator J.X. WALCOTT: Madam President, I have no constituency. Aside.

Senator J.X. WALCOTT: In terms of housing.... I am pressing along, Madam President, dealing with this Green Economy Scoping Study, and I am not listening to any nascent gases. In 2007, there was a green homes checklist which was developed. I am delighted that the present Government has ensured that it has been implemented. It spoke to the issue of persons constructing houses and, indeed, in some Government housing units. It mentioned that there would be low-flow pilots, on-site water storage and solar water heating, while encouraging people to have fluorescent light and passive ventilation, and to use alternative forms of energy. As I said, I am delighted that by and large this is being implemented by this Government. Back in 2007 also, there was started the initiative for persons to indulge in home composting. Rather than discarding all organic waste and so on in the garbage to be picked up by the Sanitation Service Authority, there was to be an initiative effort by persons at home to separate the organics, the vegetable matter, the meats, et cetera, and to do home composting. There was an educational section which started at the secondary schools, but more importantly town hall meetings were held and home composters were given out to a number of persons. There was also an initiative with Carter's company, I think, to give persons self-composters at a reduced fee. It was felt that we would broaden it so that Government would give incentives in terms of persons acquiring home composters. This was an initial aspect in terms of getting householders in Barbados into the whole concept of separating glass, paper and whatever at source, recognising that we were not as advanced as perhaps countries in North America and Europe in terms of having dedicated collection of garbage on different days.

4.59 p.m.

Insert s27 juliette

Wednesday, December 07, 2016

Senator Dr. J. X. WALCOTT: ...in terms of how the funding agencies deal with developing countries in terms of

projects that they do need or do not need, in terms of how contracts should be allocated and what you should look for. The bottom-line is that we constructed a South Coast Sewerage System and both parties are responsible for it. The contract started in 1993 and the Barbados Labour Party finished it. Government is a continuum but for all sides your issue is...

Asides.

Senator Dr. J. X. WALCOTT: Madam President, there is an Honourable Senator who a problem with memory. I did not say anything. The South Coast Sewerage Project document was signed in 1993, construction work began in 1995 and I became Minister of Health in October 2001. In 1995 was saving lives.

Having said that, I have heard the talk about companies going out of business and parts cannot be located. I will tell them, Madam President, that they should check the Internal Memo of September 2015 which was written to the Chairman of the Barbados Water Authority and copied to the Minister responsible for water resources and entitled, an Internal Memo, "Funds needed for our collapsing sewerage system. Madam President, that is all I could get. Apparently they have it under lock and key, locked up internally, but the funds were requested last September and we are seeing the results of the funds not having been received this November.

Madam President, I go on to waste management. We all know there are issues in terms of our solid waste management in Barbados. Over 1 000 tonnes go every day normally to the landfill. We have had the issues over the years in terms of the construction of Greenland and the pros and cons. We have heard depending on the season of the year the position of the mains and the cost of Greenland. It changes every time you hear some people speaking. What a world.

We embarked on a system to set up a materials recovery facility in Vacluse which was criticised but thankfully two years after the Government changed in 2009 they entered into a contract for the operation of the said facility. The facility, I am told, is operating very well in spite of the large sums owed by Government to the operators. I am also told that the chemical waste facility is up and the chemicals are there stored waiting to be shipped out of Barbados and that because of the separation, building a demolition debris, newspapers, plastics, whatever, the actual layer of waste going to the landfill has been reduced by over 50 per cent.

This document, and it is my certain knowledge, speaks not only of a material recovery facility but of a chemical waste sewerage facility and importantly a composting facility. That composting facility has never

been set up. It is in the Agreement signed in May 2009. The purpose of the composting facility was for further separations so that the organics would be sent into that area, Composting, produced biomass, which could be used either at Bulkeley or in St. Joseph for electricity generation or could be used in terms of the replenishment of our agricultural soils. That has never been done. Going forward, it is highlighted in here, I think the Government needs to move assiduously to ensure that the composting facility is established and that it is in fact paying the operators for the services it is receiving. I know the Government would never be short-changed in this respect, I know that.

In terms of energy generation, the issue with Cahill Energy I guess was someone's dream. Regrettably, some Members of a Cabinet got involved in it but for all intents and purposes it seems to be put to sleep at this point in time. Suffice it to say that the jury is still out on the necessity or the importance of incinerations for power generating in terms of the utilisation of the municipal solid waste in small developing countries because of the fears of the emissions, the dioxins et cetera, which are carcinogenic.

Finally, Madam President, I am sorry that Senator Boyce is not here but perhaps Senator Jepter Ince who has more than a passing affinity with financial matters could perhaps address this issue which relates to the green climate fund which has been established by the United Nations. Between February last year and now US\$420 million has been approved for projects to do with things like this in terms of greening. Antigua submitted a proposal, it was turned down but one would expect in these kinds of matters, given what we heard about earlier from Senator McClean and Senator Adams in terms of Barbados' leadership role and the Road to Rio and the Ode to the Environment, that certainly Barbados would have found it possible to submit something before Antigua, so I am delighted to hear that.

Madam President, I think I have said more than enough. I did not know that I would have been able to speak so much. Madam President, I am obliged to you. I have said that I support the Resolution and commend the document to all Barbadians and to all schools importantly to be read and for us to use as a sort of map going for it.

I am obliged to you. Thank you.

MADAM PRESIDENT: Senator Carmichael, you have the Floor.

Senator Dr. Sir TREVOR CARMICHAEL: Thank you, Madam President. Madam President, at this time of the evening especially as it is getting towards Christmas and the end of the year if cricket was being played John

Arlott would say that the shadows are now coming across the field, and indeed the shadows are and for that reason I should not be very long, indeed I should be very brief but my brevity is not in any way to take away from the importance of this Resolution which is before us because it is one of great significance, it is one which calls for, should we say, not only significant popular understanding but popular participation.

Let me first of all join all my colleagues in resolutely supporting the Resolution. In doing so I propose to take as my point of departure just a few areas. The first point of departure I would wish to take, Madam President, is to just merely remind ourselves if you will that our legislative framework supporting environmental activism remains quite strong and clearly it would not be within the province of this evening's discussion and debate to go into those provisions but let me however reassure us that the provisions within the Barbados Income Tax Act, which are strong provisions supporting a greening economy, are still there and that the provisions within the Small Business Development Act supporting and strengthening the greening economy are still there. Suffice it also to say, Madam President, that our International Business legislation and our Societies (With Restricted Liability) legislation which people tend to think of in terms other than the green economy but that these two pieces of legislation are also supportive of the green economy especially in circumstances where persons sell green products and services to customers outside of Barbados and where they can benefit from that 2.5 per cent to 0.25 per cent depending on the level of income, rather than a larger 25 per cent ratio which would be case otherwise. Madam President, our fiscal incentive legislation also has elements which support the green economy in terms of the manufacturing approach of products under the Act and which products support the green economy.

Madam President, as we are all aware, as early as in the 1970s and 1980s we had the support which was given to the solar water heating industry. I have said in this Honourable Chamber before and I repeat, it was an amazingly great start which Barbados took in the area of environmental activism because at that point we were the second country in the world to introduce solar water heaters. Interestingly enough, and both parties were little ambivalent as to how aggressive we should be in that environmental activism at that time, because if one may recall, Madam President, even the income tax incentives which were given to the solar water heating industry were at one point removed and had to be replaced. I always find that a bit interesting and I did yesterday in particular when scrolling through my emails I got an email and I would not say which country it was from, but I will allude to it where the writer says that they are manufacturers of water solar heating systems in "X" country and that they mainly supply the following products: flat plates, solar collectors, solar

absorber plates or films, 3.2m.m. or 4m.m. tempered glass, EPDM rubber sealing gasket aluminum sheet, copper fittings and valves and solar pool heating. Madam President, I smiled when I got that email a day or so ago because that in a sense is the type of email that I would suggest that should have been leaving the shores of Barbados around 1980 or 1981 but instead we are getting emails from someone who is seeking to supply us with these things.

Madam President, having said all of that, the Green Economy Scoping Study is one that obviously has to be supported and as my colleagues have correctly pointed out, it is one which requires great public education but I suggest that there is another element to it, we need to be sure that it gets a level of bureaucratic responsiveness which it deserves when applications are made to benefit from the various environmental incentives which are available. I think that is very, very important.

Madam President, as a point of departure let me take very briefly an element which I think this Green Economy Scoping Study as a document should spur and stimulate and I am thinking in terms of what is called the Green Bond market. Madam President, a few years ago the Green Bond market was an uncharted territory, today it is a high-growth area that has seen rapid development. Madam President, my question is, and the thing that puzzles me and I hope that it puzzles our policy-makers as well, how we can tap into this market of socially responsible investors? How can our Governments and our private sectors encourage and push environmental finance within the region, of which Barbados can benefit? This is something we need to put our mind to. The multilateral banks, including the European Investment Bank are now committed to contributing to the sustainable development of green bonds. There is clear commitment, if you look at any of their literature, if you talk to any of their officials, this is high on their policy agenda.

Madam President, I suggest too that this is a unique capital market segment and we must get involved in this type of development. Madam President, I will give as an example four recent European projects that have received allocations from climate awareness bonds, otherwise the European Investment Bank Green Bonds. One was set of residential buildings in Romania. Another was a solar complex in Morocco. Another was an offshore wind farm grid linking parts of the United Kingdom, and the fourth was research into more efficient renewable energy applications in Spain. Madam President, you may say that these sound like just miniscule things but let us look at the size of these investments. In the case of the residential buildings in Romania, we are talking about one thousand residential buildings receiving that type of financing. In terms of the solar complex in Morocco, we are talking about the potential capacity to power a city of 250 000

people. In terms of the offshore wind farm grid link in the United Kingdom, we are talking about 100-km high-voltage transmission connection linking an offshore wind farm to the United Kingdom national grid. Obviously, in terms of the research which I talked about, this is research into climate-friendly technologies in Spain.

Madam President, I suggest that with this level of activity and use of the Green Bonds in Europe we should seriously be considering positioning our capital markets and looking at the development not only of Green Bonds but I think we should go one step further but also looking at Blue Bond, because we are surrounded by the sea and that is what the whole Coral Restoration Trust is about which I raised in this Honourable Chamber before and which is very much part and parcel of what the Belair Research Institute is currently undertaking and therefore I suggest that the Green Bonds must be seriously considered.

Madam President, what then should we be doing? I suggest that we should have the Green and Blue Economy as a mantra of survival but also as a mantra of progress. I suggest that we should seek, as my colleagues have so eloquently said, to integrate green living into everything that we do and everything that we plant. Madam President, in that regard, I myself have tried to play a small part in the introduction of a new international film festival which will be starting in Barbados -- and I am not plugging but it all fits in with what is taking place here today -- on January 11, 2017. Madam President, what is important about this international film festival is that not only will it be bringing some of the major moviemakers and producers globally here to Barbados for those five days. They are actually staying for seven days, we have given them two extra days to get to understand Barbados better. Madam President, what is important about international film festival is that a major component of it within the festival is an environmental film festival. We have in our business plan sought to incorporate students, who will be on holiday at that time, so that we will be involving students very much in that environmental component of the film festival. We have awards for the films, including many films to be shown. This film, within the last month, is really an environmental icon as far as film-making is concerned. Not only will it be here but the makers of that film -- producers, directors and so on -- will all be coming to Barbados to discuss that film and to inspire and encourage particularly our young people in terms of environmental activism. I suggest that this environmental film festival is very much consistent with the Scoping Study, because what it is doing is bringing the environment into the everyday lives of people who live and work here and who enjoy the beautiful environment which we have here for all to see, visit, enjoy and the like.

Madam President, I only raise these points to again reiterate that this is a very useful reference Document;

extremely useful. I would like to laud the efforts of the stakeholders engaged in the production of this Study. It is always invidious to single out any person, and I would like to pay tribute to all of the persons with the Study, but I would like to pay special tribute to Dr. Robin Mahon. I say that because Dr. Robin Mahon's recent lecture at the University of the West Indies, as part of its 50th anniversary series, is required reading by citizens as well as policymakers because that, too, is another literal mini-scoping study, if you will. It was a most engaging lecture, but what was so special about it was that it was a lecture which was not only descriptive but it was highly prescriptive and done in a very non-judgmental manner and in a way which was very easy for people to understand and to seek to explore further.

Madam President, I said I would be brief, and indeed I have been brief, and in concluding I would like to just remind everyone, consistent with what I was talking about in terms of green bonds, that recently the European Investment Bank indicated that it would be putting \$50 billion in the next five years into climate change finance. They are going to be doing that worldwide over the next five years, so I am suggesting that should be a sign that we should either seek to benefit from that in terms of acquiring it if we can, but also -- and I like to think in this latter sense even more -- we should be looking to create where possible our own regional initiative of this kind. We have a lot of capital within the region, and we need to put it to work for environmental purposes. Madam President, I am much obliged.

SUSPENSION

Senator Hon. Ms. M.P.O. McCLEAN: Madam President, I beg to move that this Sitting be suspended for 15 minutes until 5.45 p.m.

The question that the Sitting do now suspend until 5.45 p.m. for 15 minutes was put and resolved in the affirmative without division, and Her Honour the PRESIDENT suspended the Sitting accordingly.

5.33 p.m.

Insert s31 juliette

Wednesday, December 07, 2016

Senator H. A. HUSBANDS: ...This system has been doing in the area or in areas connected to those issues raised in the Green Economy Scoping Study. A number of the educational institutions, particularly the Samuel Jackman Prescod Polytechnic and the Barbados Community College, have all initiated a number of programmes especially in the area of photovoltaic installation. Senator Walcott raised the issue about what

has become of that matter of photovoltaic installation. I know that tremendous training is taking place at both the Barbados Community College and the Samuel Jackman Prescod Polytechnic. I had a conversation with them and they assured me that the work is ongoing. There are courses at both institutions. The Samuel Jackman Prescod Polytechnic have even partnered with a community college in Canada. It is really indicative of something that the Canadians could be teaching us about photovoltaic installation. We have been in this solar energy business for so long that we should be teaching the Canadians but these are the facts of life.

Madam President, let me reverse a bit before I get into the specifics of issues around the Study. I know, Senator Hunte raised it and I am total agreement with it, that we have to take rather seriously that while we are debating this Study that at the same time our largest neighbour to the north which has recently completed their presidential election, the President elect, has declared the issue of climate change and climate warming to be a hoax brought on by the Chinese, and the New York Times reports today that he has appointed an allied of the fossil fuel industry to head the Environmental Protection Agency so this debate that we are having has significant international implications. It is not only what we can do but should our largest neighbour to the north turns its back on these issues, what would be the response from the two other large economies in the developing world namely the Chinese and the Indian economy and what are the implications for all of that for a small open developing country like Barbados, so that is the backdrop I think, an important backdrop nevertheless, that is important for our consideration in this matter.

Madam President, let me return to the work that is being done. We have to bear in mind the issues that I have mentioned on the international level but we cannot allow that to control how we think on these matters. It is an important factor but it cannot control our thoughts on these matters. Bearing in mind that the issues brought up in the Green Economy Scoping Study are so related internationally nevertheless we still must proceed, so the Barbados Community College is working in conjunction with Sault Community College in Canada, Arizona State University and locally with Williams Industries on their course in photovoltaic installation. The course is graded at Level 3 of the Caribbean Vocational Qualification. Within the scope of the Caribbean Vocational Qualification, Level 3, I may be making an error, is related to the Bachelor's level so they are at a pretty far advanced level at the Samuel Jackman Prescod Polytechnic on that issue.

In 2013, the Barbados Community College was invited to Essex Community College in New Jersey, they took 23 students and two tutors, to start training on a course in hydroponics and subsequently the Essex

Community College donated to the Barbados Community College a plant that the Barbados Community College has been using to teach a course in hydroponics. As I understand it, it is an extremely popular course. I have seen the plant and the equipment in operation and I am extremely impressed.

Now, this is important because as I have said here Honourable Senators may not remember but I have said that the Ministry of Education, Science, Technology and Innovation was in the final stages of negotiations with the Chinese on the Hope Agricultural School in St. Lucy. We have passed the final stages of that Agreement. We are in full agreement now with the Chinese. We are supposed to sign off on the documents for financing and support to bring to reality the Hope Agricultural Station, and the connection between the hydroponics programme at the Barbados Community College and the points made within the Green Economy Scoping Study about modern methods in agriculture which will all be integrated into the Hope Project in St. Lucy, so we are much further along and we expect that our new graduates in agriculture will be extremely familiar with the issues around agriculture developments that have been outlined in the Green Economy Scoping Study so there is an integration taking place that the planners are taking into consideration and we are making some progress in that area.

The Barbados Community College is also looking for funding for another project. When the young lady was describing these things to me... We politicians sometimes have to stand in front of microphones and pretend that we know everything about everything but I will admit to you that a very bright young lady at the Barbados Community College took pains and the time to explain to me this next project for they are seeking financing. It is, I think, an extremely worthwhile project on post-harvest. In short, they are seeking to train the staff in supermarkets on how to preserve food mainly vegetables and other produce on the shelf using less chemical measures to lengthen shelf life and also the distribution of unsold produce after a certain length of time. That is an area of speciality that they are attempting to develop and they are in need of funding to bring that to fruition.

Madam President, Internationally and Barbados there is great concern about the still large volume of food that is still consumable but is discarded, while people outside of these supermarkets and food processing plants go hungry. Ma'am, I do not know if something like that is mentioned specifically in the Barbados Green Scoping Study but if the Barbados Community College could develop such a course and train staffs in supermarkets in this kind of thing, I think it would be a tremendous influence on the development of a green economy.

Madam President, we have also installed in several schools throughout the country the solar panels for the generation of electricity. Only last week I had the pleasure of flipping the switch at St. Leonard Boys' School and at the St. Alban's Primary to bring on stream their solar energy generating systems. I want to pay special thanks and congratulations to the staff of the Ministry of Energy. Senator Boyce and his staff are very enthusiastic and took me around to these two schools to perform this important function and so we are saving the Government a tremendous amount of money.

Madam President, Senator Walcott raised the issue as to what has become of the programme but as a matter of fact, that programme is developing. I would want to say that I encountered a quite reserved old-fashioned lady and when she began to explain to me that she has solar panels at her house and that she is getting cheques, I realised that, as they say, I am old fashioned. I am saying that we need Senator Boyce's department to do a number of audits to see exactly how many people are on the grid, because I suspect that there are more people out there who are taking advantage of this than we may at first realise and they are doing it quietly and without fanfare.

Madam President, we have done a lot in the school system to transform the school systems because the buildings at these schools. When I visited with staff of the Department of Energy these young men and women are excited about the roofs that they see at the schools and about what they can do with them. It is that they may not immediately have the finance to push forward but they salivate when they see the roofs at those schools and so that programme is going ahead and is doing so pretty well.

Madam President, I want to spend a few minutes on the issue of water. I have said at a meeting that the Democratic Labour Party has had -- and I believe strongly that the challenge facing us and our development is that we do not have enough water to guarantee our development. We have been saying for a while that Barbados is water-scarced country. This was brought home to us recently because our serious shortage of water for development in all the areas that Senator DePeiza mentioned has been brought starkly home to us as a result of the recent drought, they are interrelated. We have been saying for a long time that Barbados is high on the list of water-scarced countries, then there has been an 18-month's drought. Ma'am, the drought has been throughout the region, it is not anything special to Barbados. I have a colleague in one of the neighbouring islands who work with the local water authority in this island, who said to me that some days he hides from the public because he has no water. Furthermore, he lives in the main affected area and so sometimes he has to hide from himself because he has no explanation to give himself because of the nature of the drought. He travels to Barbados regularly and has a big

laugh at Bajans when he listens to the call-in programmes, without they understanding the true nature and implication of the crisis that is facing us.

Madam President, we have come up with a number of solutions, one is desalination plants. Ma'am, if you listen to these radio programmes where sometimes you hear people calling for the building of two more desalination plant, but Madam President, that is at a tremendous cost. Ma'am, whether this Administration or the other people who the only thing they are thinking of is taking over Government, we have to start explaining to people that this desalination plant is going to be expensive, it may have to be done but that it is going to be a cost and would not be free and that it is going to add tremendously to the cost of the Barbados Water Authority. Therefore when we talk about deficits, about Government spending, about Government cutting its spending, we are in a period where we are attempting to rebuild the entire water system of Barbados and it is costly.

Madam President, last week at the meeting of the Social Partnership the General Manager of the Barbados Water Authority started to add up numbers. I was sitting next to Senator Boyce who started moaning and groaning when the Manager reached \$1 billion and the Manager was not yet half-way, but I think there are a number of things that we need to do. Ma'am, Senator DePeiza mentioned the issue... I remember when I renovated my house the people from the Town Planning Department made me dig this enormous hole in the ground. When I went home in the evening and saw this enormous hole in the ground I went ballistic. The Chief Town Planner and I went to the same primary school, but that cost a fortune and I was angry but here recently I realised what a tremendous benefit it has been, it collects all of the water from the roof and like a lot of Barbadians who have these systems and have not connected them, I connected mine recently and realised what a fool I have been all this time. The only regret that I have is that it is not connected to my toilets or to my domestic supply for potable water.

Madam President, my brother lives in Tortola and I have visited him on many occasions and it was only in June that I realised that all of the water consumed in his house comes from two enormous tanks under his house. Every now and then the Public Health Authority would visit and check and do what they have to do, but the only time that my brother goes to the public supply would be if his rounds are low, where he would then refill, but all of this water for drinking, the toilets, et cetera come from two large tanks under his house. Ma'am, to all those people who have tanks that are not connected, take my foolish advice and connect them, it is the best decision ever made. Ma'am, first of all, one of the reasons I did not attempt to have it connected was that I thought it was going to be so costly or so much trouble but when you turn that tap on the water flows just

like any other, the pump comes on automatically and starts to pump. I know that the Ministry of Health and the Ministry responsible for water are planning some system where you can connect that supply at least to the bathroom. The problem with all of us in Barbados having those large tanks under our houses collecting water and not using it, is that it aggravates the drought situation. That water does not get back into the system. It just lies there in some tank under your house. The idea of having one of these plastic tanks that is connected to the domestic water supply, again, defeats the purpose. We have to go that extra mile.

MADAM PRESIDENT: The Honourable Member has one more minute.

Senator H.A. HUSBANDS: One more minute, Ma'am. Let me say something about privatisation. We discuss issues around privatisation as though it is 1970 when I was young fellow with an afro and a dashiki and so on. The reality is this: The things that we need to do to rebuild this water system, especially in the area of desalination, is going to be extremely costly. We cannot ignore private sector involvement. We have to face it squarely that in the future, if we go the desalination route, a large part of the water will come from the private sector. We cannot stand and say never, ever have the private sector involved. The private sector is already involved in water anyhow. We cannot stand with our fists in the air, saying no to privatisation. We have to look at it and take a rational decision on it. Nothing is to stand in the way of the development of this country. Everything is on the table in the development of this country as we go forward.

Madam President, the same goes for garbage and garbage collection. At the back end, we discussed the collection which is the small part. That is why we brought this thing about Cahill, because at the back end it is going to be extremely expensive and we cannot ignore the contribution of the private sector. You are hearing this from a person who, in the 1970s, talked all about the commanding heights of the economy and so on. You cannot ignore it. Nothing can stand in the way of the development of this country. Madam President, I want to thank you for this opportunity and close by saying, "This Resolution and this Scoping Study have my fullest support. I thank you."

MADAM PRESIDENT: Senator Watson, you have the Floor.

Senator J.A. WATSON: Thank you, Madam President. This is the second occasion on which I have to say that I have faltered by speaking after Senator Husbands, and this is only because it was my intention to congratulate the Chairman and Deputy Chairman on the 50th Anniversary of Independence celebrations. Since he has done that, I will go on to the congratulating of the other

two and, Madam President, I want to congratulate you on an excellent lecture which you did at the University of the West Indies. The fourth one would have been to Senator Dr. Carol Lady Haynes on her award of a Doctorate, and to Senator Sir Trevor Carmichael as well on receiving an Honorary Doctorate. It shows that this Senate is not entirely useless.

Asides.

Senator J.A. WATSON: Madam President, like all the other Senators who spoke before me, I must support this Document. I think it is very in-depth, and I say that even though I have not read the entire Document; but when I scan through it I can see the depth which it has. I noticed that it focusses on five areas: agriculture, fisheries, building and housing, transportation, and tourism. Following what I think Senator Ince said, and I agree with it, it is really like a business plan for Barbados. It is almost like a roadmap for the development of Barbados going forward, and that is where I have a bit of difficulty with it because, if you are thinking of the overall development of Barbados, right now we focus on tourism but we know that tourism cannot be the only thing we focus on in our development going forward. I am glad to see that agriculture is a focal point in it as well.

Madam President, I believe that national development in Barbados has to come from the productive sectors of manufacturing and agriculture, and I think that small business development must play a substantial role in the overall development of Barbados. Madam President, I say that because I have read the descriptions of what a Green Economy is, two of which are in this Document, and I will read them. One says that the Green Economy is one that results in improved human wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities. The other one, which is also in this Document, says that it is an integrated production, distribution, consumption and waste assimilation system which, at its core, reflects the fragility of our small-island ecosystems as a basis for natural resource protection policy intervention, business and investment choice, human and development programming, and the facilitation of export development strategies. When you listen to that, it tends to tell me that somewhere in there, there is something to do with manufacturing. The one that I found which I think I like most is one that says it is a system of economic activities related to production, distribution and consumption of goods and services that result in improved human wellbeing over the long term, while not exposing future generations to significant environmental risks and ecological scarcities. Madam President, in other words, what I am gathering here is that the Green Economy must be one that, whatever we do in its development of the environment, we must have the human factor at the fore. In other words, the result must be always that the human

becomes better off than they were at the start, and in achieving that objective I think that we have to determine how you get that done.

6.33 p.m.

Insert s35 juliette

Wednesday, December 07, 2016

Senator J. A. WATSON: ...scientific and engineering ideas and innovations.

Madam President, I speak under correction but I am told that as of May this year the Engineering Degrees at the University of the West Indies would not be the accredited level for a chartered engineer. As a matter of fact, it would seem that none of the areas in engineering, civil and environmental engineering, construction management, Civil Engineering MSc., and environmental engineering, were accredited and that is serious because what that means is that a person who qualifies in engineering from the University of the West Indies will not be accepted to do his or her chartered examinations and cannot become a chartered engineer.

Madam President, it must be pointed out that many years ago all of the engineers at the Barbados Water Authority were chartered engineers. I cannot remember the names, but I believe Mickey Sealy would have been one and Keith Johnson might have been another one. I am not sure that we have many chartered engineers in Barbados anymore and that is an extremely important profession for the development of the Caribbean including Barbados, and therefore I want to end on that by imploring on the Ministry of Education, Science, Technology and Innovation to see what can be done about that and to see what is the reason that we have reached that level of not being accredited at the University of the West Indies because going forward it is engineering that will help us develop.

Madam President, I will end there by commending the preparation of this document. I have not read it in its entirety but from what I have read and what I have seen so far it is a very worthwhile document, it is a world map, and my parting comments would be to make sure that we have some mechanism that will make sure that the policies in here are implemented and continued to be monitored and upgraded as we go along. I hope that in a year's time we would see a revised document with improvements on this document.

With that, Madam President, I want to thank you.

MADAM PRESIDENT: Senator Todd, you have the Floor.

Senator the Hon. P. M. T. TODD: Thank you very much, Madam President. I rise to support this Resolution and to say that I am very happy that our Prime Minister, the Right Honourable Freundel Stuart, has focussed on the importance of sustainable development. This was encompassed by his call in the lead up to the last General, and I will quote from the Leader's Message on the first page of the Democratic Labour Party 2013 Manifesto which of course is a document of this Chamber. It says in one paragraph: "This Manifesto envisions a Barbados that is socially balanced, economically viable, environmentally sound and characterised by good governance. In fact, the fifth section of this Resolution says: Be it resolved that the Parliament of Barbados reaffirms its commitment to ensure Barbados remains on a path of sustainable development that is socially balanced, economically viable, environmentally sound and characterised by good governance.

Our Prime Minister in this message at the introduction of our 2013 Manifesto went into details in terms of what is meant by socially balanced, and I paraphrase, the need for the country to ensure that no one is left behind, that the greatness of any society is not measured by the successes of a minority but must ensure every person within the society regardless of their station in life are given an opportunity so that they can fully realise their God-given potential, and that social balance is a prerequisite for social stability. We heard Senator Watson referring to the whole issue of social stability in the definition of a green economy so I see the Prime Minister's focus as being very relevant to what we are dealing with today in terms of economic growth that is a sustainable and economically viable ensuring that the environment is not in any way degraded. In fact, when the Prime Minister talked about what is meant by environmentally sound he is effectively focussing on the fact that humankind in the past may have done injustice to the stability of the environment, but going forward in order for humankind to exist within the fragile global environmental ecosystem we must respect nature and that if development compromises the viability of the maintenance of this delicate ecosystem then the very existence of humankind will be threatened so this is where we need to ensure that in seeking to effect economic growth that we do not compromise the environment.

Madam President, even in terms of economic viability, the Prime Minister is making the point that in seeking to propel the economy forward we as a society must make sure that the capacity of the country to sort of sustain the economic development is not compromised so that our goals that we set in terms of economic targets must be realistic, that they must not stretch the economy in terms of the limited natural and other resources that we have available to us so that in the case of fisheries we do not overfish and in the case of tourism that we know what our

limit is in terms of the number of tourists that we can comfortably accommodate in the country without necessarily giving rise to excess pollution be it sewerage and other stresses on the environment. Of course, we have a long way to go in terms of reaching that limit. I would not wish in any way to retard the development of the tourist sector but I am saying that what the Prime Minister is calling upon us to do in terms of this being economically viable is to ensure that our targets can be achieved within the context of both our needs and our endowments.

Finally, in terms of good governance, I notice that again in our leader's message in the introduction to the Democratic Labour Party 2013 Manifesto that our Prime Minister in that section on good governance is focussing among other things on the fact that as we propel the economy forward that the voices of vulnerable groups within the society must be heard in the decision-making and in the allocation of resources. Madam President, I think that really puts into context our focus on this issue of the Green Economy.

Madam President, without going into too much detail there is the whole issue of stresses to the environment is relevant. I did biology up to A-Level First Year at the university and I know that it is very important to achieve a symbiotic relationship in any delicate ecosystem, that is, for example, when bees go from one flower to the other to get nectar they take pollen from the male to the female giving rise to fertilization and the production of fruit, so that bees are really not pests, they make honey. Beekeeping can also be seen as a viable economic endeavour. In fact, we have Mr. Rudy Gibson, Jemmott's Lane who has been able to develop this beekeeping industry to a significant level. He must be congratulated for clearing hives from bees-infested areas such as buildings and trees and capturing these hives and being able to increase the production of honey which is very nutritious and therapeutic in terms of addressing certain illnesses and so on and honey goes better in terms of the reduction of the possibility of developing diabetes and so on in terms of refined sugar products.

Madam President, the point I am making is that that is an example of a symbiotic relationship with the bees and the pollination of plants, whereas what is not recommended is a parasitic relationship where one member of the ecosystem is depriving the rest of the ecosystem of the ability to exist. Ma'am, I mentioned overfishing, be it sea eggs or deforestation where areas of forest were cut down indiscriminately to support fuel for cooking purposes or for agricultural development. Ma'am, because of this excessive deforestation previously fertile land ended up being deserts or arable land. These are example of parasitic relationship that gives rise to an imbalance in this delicate ecosystem, so as we seek to exploit the resources within the

environment there must be limitations so as to not threaten the very existence of human kind.

Madam President, for example, what this reminds me of is that I was fortunate a couple of years ago at this time to represent Barbados at a Commonwealth Parliamentary Association meeting in the House of Parliament, London. We were exposed to very Senior Ministers of Government, the Speaker of the House, the Deputy Speaker of the House and Leaders of the Opposition. In that experience we learned from leading politicians in the British Government that one dilemma which they faced, as I sought to lobby for reductions in the Air Passenger Duty which was imposed at the time, was that they thought they were doing a good thing in terms of addressing the issue of the carbon emissions from jet engines of aircrafts in terms of that tax seeking to reduce the amount of emission in terms of the extent of air travel, so that while seeking to address that issue we would have had our challenges here in terms of its impact on the number of tourists coming to Barbados.

Madam President, I just remember that to make the point that globally we are all concerned about being environmentally sound in our economic development. Madam President, this Green Economy Scoping Study is very important so that as we seek to develop our economy, to ensure that the quality of life and standard of living of all of our citizens are improved and that we do so in a responsible way so that current and future generations are not impacted negatively upon.

Madam President, I talked earlier about the whole issue of agriculture and what I would wish to say is that I am very happy that, for example, the United Nations Development Programme has been able to assist Barbados. I remember a few years ago at the opening of the Barbados Agricultural Society annual event, AGROFEST at Queen's Park that I witnessed the signing of the United Nations Development Programme Small Grants Initiatives in which the United Nations Development Programme was providing grant funds to the local agricultural sector to improve the genetic stock of the Blackbelly Sheep population in Barbados. Ma'am, this is a very simple exercise, but it is very important to ensure that we can ensure that the Blackbelly Sheep industry in Barbados can grow from strength to strength, because again if we overexploit that sector then the liability of that special breed of sheep that is indigenous to Barbados would be threatened, so that this injection of funds from the United Nations Development Programme was and is still much appreciated.

Madam President, I also remember that the United Nations Development Programme was also instrumental in assisting vulnerable groups within our society, persons with disabilities in developing their programme in terms of

seedling production in the St. Andrew area, again ensuring that in our thrust to development that we do not forget those vulnerable groups.

Madam President, also in terms of agriculture I would wish to congratulate the Barbados Agriculture Development Management Company for pressing ahead in seeking to diversify agriculture in our country. We have seen in recent months that they have achieved success in terms of the commercialisation of the production of cassava to be utilised in the commercial production of bread. I would encourage Barbadians who have not as yet sampled the Junior Sandwich brand, produced by a major baker in this island, either in brand or plain in which a certain percentage of the constituents would include what they call grated cassava mash, it is not actual flour but I understand that bakery has found that the best results are found in actually utilising freshly grated cassava mash that is then properly chilled and so on to ensure that it does not spoil, but I must say Madam President, that I have found this final product, the actual sandwich brand, to be very tasty and to be of a very high quality because one can actually taste the traditional sticky flavour in the cassava as we would normally experience it in the cassava pone, so it gives a real sweet taste to this product and the potential is tremendous, Madam President. In fact, the demand has outstripped the supply so I would encourage Barbadian farmers to really make contact with the Barbados Agricultural Development Marketing Corporation (BADMC) to see if they can get involved in assisting in the increased production of cassava to supply the demand. Madam President, I just talked about those two products but we have salt bread and all the different bread products made by bakeries throughout this island that have not tapped into the utilisation of this cassava substitute for flour, which of course does not have this high gluten content and so on. The development of this sector would reduce, again, the need to spend valuable foreign exchange to import the constituents which we utilise in the production of wheat flour, Madam President. Although we may produce the flour locally, the ingredients in terms of the wheat still have to be imported from outside of the island, thereby using valuable foreign exchange.

Madam President, it reminds us of Guyana when the late President Forbes Burnham had practically banned the importation of wheat flour, and there was this big hue and cry when the substitute of cassava bread was being offered. Here it is now, decades later, we are achieving this tremendous success. I think it was a different type of product; it was some sort of dry wafer, but I am happy that technology has improved so that we are getting these good results. I really would wish to congratulate the senior executives at the BADMC, two Lodge School mates, Mr. Sean Tudor and leading scientist Mr. Carlton Batson, my schoolmate at Lodge and also at Harrison College with me in Sixth Form; very bright people who have been engaging

in serious innovation. I am the Government's principal director on the Board of the National Initiative for Service Excellence (NISE), and I congratulate Ms. Tudor and her team there as well for the excellent work which they continue to do to promote service excellence within our country. One event which NISE sponsored was a breakfast meeting/seminar at the Hilton Hotel a few months ago, which was over-subscribed with hundreds of participants from the business, public and private sectors. They brought in a resource persons who was a senior executive at Blackberry and who has since gone over to Samsung. At that event, one of the local success stories highlighted was the same BADMC and the fact that it has been able to innovate in the cassava bread and several other new products, utilising local resources. For example, within a period of just a few short months they were able to innovate and create a commercially viable sorbet; a sort of ice-cream equivalent, very tasty, and utilising local agricultural products, Madam President. Those of us who would have visited Jamaica, in the heart of Kingston on the old Hope Road there is the famous Devon House where on any Sunday, especially, there is a promenade like a public park with an ice-cream parlour that is world-famous for ice-cream made from local fruits such as guava and soursop. There is tremendous potential in terms of the utilisation of local fruits in the commercial production of ice-cream, Madam President.

The BADMC team has also been innovating in terms of utilising the cassava to make dinner rolls and sweet biscuits, and utilising local lamb to make hams, and pork sausages. Carmeta's is their outlet and there is a branch here in Bridgetown, and I encourage Barbadians to patronise the services provided here. I really would wish to congratulate pioneers in this area in terms of innovation in food production and the production of commercial food products. You would have heard the name Carmeta's in tribute to the late Carmeta Fraser, who would have pioneered the use of Barbadian produce in terms of cooking; products such as Blackbelly lamb. Of course, there is Marion Hart who recently retired from the Ministry of Agriculture and who would have done a lot of pioneer work in terms of the production of breadfruit flour, to add to wheat flour in the production of breads. I would have tasted some of her bread which comprised more breadfruit flour and less wheat flour imported from abroad; very tasty, Madam President.

There is tremendous potential in terms of the development of the agricultural sector, and of course other Senators would have mentioned the linkages between agriculture and tourism. I would wish to congratulate the hotel sector. We have Sandals. We have public endorsement via advertisements on television, where leaders in the agricultural sector have indicated that they are satisfied with the tremendous response from Sandals which purchases its fruits and vegetables from local

suppliers, Madam President. This must be encouraged. I have gone to the Hilton Hotel on occasion and I am very happy to see that as a part of their breakfast menu, they serve sweet potato chips rather than just the English potato chips; very tasty recipes, Madam President. I have even experienced on some occasions sweet potatoes being used to make tasty potato salad rather than the imported Irish potato, Madam President.

It is very important that we do not have an over-supply of papayas or tomatoes, and the farmers cannot find a market; so it is very important to have that linkage with the tourist sector and restaurants and so on in order that the farmers would be encouraged to actually increase production and be able to sustain themselves and their families and make a small profit, Madam President. This ties in nicely with the whole issue of food security and food sovereignty. I was very disappointed many years ago as a student leader visiting St. Thomas, United States Virgin Islands. Whereas there was a lot of tourism development, huge supermarkets and fancy cars, there was hardly any agriculture because it was easier for them to just import everything from Puerto Rico or mainland United States of America. The environment therefore was not very attractive because there was a lot of bush; not the manicured, aesthetically beautiful environment which we observe when we fly into Barbados and see proper agricultural development in terms of sugar cane and non-sugar produce to keep the environment aesthetically pleasing and reduce the infestation of vectors that would be harmful to our health, Madam President. We need to ensure that we are not dependent on imported food but have a viable agricultural sector to ensure that we save foreign exchange in terms of import substitution. Local production and then agro-processing can definitely go a long way to ensure that excess production of fruits and vegetables are not spoiled but can be used in agro-processing in terms of the production of jams, jellies, tomato ketchup and other condiments that would then even be exportable, Madam President. One just has to think of good Barbadian hot sauce which is world-famous.

7.12 p.m.

Insert s39 juliette

Wednesday, December 07, 2016

Senator the Hon. Miss M. P. O. McCLEAN: ...to that our living resources, we talked about fishing and the importance of that, the non-living resources, oil and gas and the possibility of other valuable minerals, and of course the ecosystems and the ecosystem processes. I mentioned that our coral reefs, our mangroves and all of these things are critical because at the end of the day the health of our ocean is essentially an important part of our own health as citizens and our land space, et cetera. Madam President,

one of the things I believe we have to pay specific attention to and integrate into our efforts would be the whole matter of our oceans focussing on issues such as addressing problems of overfishing, pollution, coastal development, et cetera. Madam President, I do not plan to go into that beyond flagging that it is a critical element of any effort to green our economy.

Overall, Madam President, I think we have demonstrated very carefully that this Green Economy Scoping Study is not simply a study that is to be looked at and agreed was significant work but that we see it as an important information document as we have heard before and one which should inform planning processes at what I would call the domestic level, the micro level being at the firm level, and certainly at the level of Government policy which speaks to our domestic policy as well as our regional and international policies which impact on us and about which we should have some input.

Madam President, I believe in doing that we have demonstrated that beyond making the public aware of this, it is important that we as policymakers in our various spheres within the context of our role as senators and therefore lawmakers and within the context of some of us being Members of Cabinet and therefore public policymakers as well as entrepreneurs and other kinds of decision-makers should take this on board and recognise that however or wherever we locate ourselves the issues tackled in this Study and the recommendations made will bear some relevance to our work as we seek to build a better Barbados to build a just society. Of course, as the Resolution is suggesting in order to do that we have to remember those pillars that have been proffered by this Administration in terms of ensuring that we are focussed not only on things economic but things that are relative to our social situation and at the end of the day ensure that there is social balance and that we are able to build on environmentally sound policies and that clearly we do this within the framework of good governance if we are to make sure that we can provide for the long-term economic viability of our economy and make our contribution regionally and internationally as a leader as it relates to issues relating to sustainable development more specifically to Small Islands Developing States.

With those words, Madam President, I beg to move that this Resolution do now pass.

The question that the Resolution do now pass was put to the Senate and resolved in the affirmative without division.

ADJOURNMENT

Senator the Hon. Miss M. P. O. McCLEAN: Madam President, I beg to move that the Senate do now adjourn sine die.

Speaking on the adjournment though, Madam President, I am not certain that we will meet before Christmas and therefore coming on the heels of the just concluded year-long celebrations I would hate to leave this Chamber without following in the footsteps of my Senate colleagues who would have offered congratulations... I cannot congratulate myself and I certainly would not because first of all there was a Committee that planned the celebrations and I would want to thank the Prime Minister for sharing his vision for the celebrations as well as to thank the Secretariat headed by Permanent Secretary Gabrielle Springer and her Deputy Commander Aquinas Clarke and that very small team in the Secretariat along with all of the members of the committees, the coordinating committee and the subcommittee, for making what to my mind was a year of very important celebrations.

Having accomplished that, I think that we need within the context of all we discussed to take the initiative forward not only as we celebrate Christmas but as we go forward over the next year to build on these things, and I think a very good platform on which to build would be the contents of this Study because it talks about the future that we desire.

Having said that, I also would want now to extend my best wishes for what I hope would be a blessed Christmas season. I would want to thank especially the members of staff of Parliament, the Clerks and all of those persons who make these Sitting possible, the members of the Royal Barbados Police Force, the staff of Cabinet Office who service our meetings and the catering and other ancillary staff who make our days and nights pleasant.

Above all, I want to extend my appreciation to my colleague senators for what continues to be very cordial discussions. I was able to have a guest with me today and in showing her around I reminded her that when we sit around a table even if it is a large table like this it imposes on us a certain standard of behaviour, so whether we like it or not we literally find ourselves in a position not to shout at one another. The table creates a certain ambiance and so I want to express my best wishes to my colleague senators for the Christmas season. As I said, in the event that we do not meet again before the beginning of 2017, I also want to wish everybody the best for the coming year if we do not see each other as I said before then, God's blessings on all of us and I trust that we will also have a bit of rest in between there until we meet for the next Senate Sitting.

HER HONOUR MADAM PRESIDENT: As we prepare to adjourn for this evening let me first draw

Senators attention to an event “Carols at Parliament” which will take place tomorrow in the courtyard of Parliament from 6:00 to 8.00 p.m. I hope that many of you would be able to join us as indeed the general public of Barbados is invited to join us as we have carols in Parliament.

Let me also take this opportunity to congratulate the Committee and the staff of the 50th Anniversary Secretariat for an excellent period of celebrations beginning in January and running until December 01. We had some challenges but all in all we had celebrations, activities and commemorations of such a high standard. The University of the West Indies did their programme, several community organisations also did private observations and others did all kinds of observances recognising the value of this 166 square miles that we all so dearly love, so deepest congratulations to all of you. I also take this opportunity to wish everyone, in case we do not see each other again, a very happy and blessed Christmas season.

The question that the Senate do now adjourn sine die was put and resolved in the affirmative without division and MADAM PRESIDENT adjourned the Senate accordingly.

Senate C35 Sequence 40

7.35 p.m.

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2. The Duties Taxes and Other Payments (Exemption) (University of the West Indies Commonwealth Shorts) Order, 2016; and
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BARBADOS:

- (1) ACCEPTS THE BARBADOS GREEN ECONOMY
SCOPING STUDY AS A NATIONAL
INFORMATION DOCUMENT;

- (3) LAUDS THE EFFORTS OF THE VARIOUS
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OF THE BARBADOS GREEN ECONOMY
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- (4) REMINDS BARBADIANS OF THE IMPORTANCE
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HUNTE, Senator R. A.

HUSBANDS, Senator H. A.

INCE, Senator J.

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EDITORIAL NOTES — NOT PART OF THE REPORT

Prepared with the transcript; for checking against the recording and the Minutes.

EDITORIAL QUERIES

Points noted while preparing this report from the edited transcript. The text has not been altered except where stated.

Q1. Masthead. The session is not stated in the source, so no session line is printed.

Q2. Order No. 1, throughout (take-slips S4, s15, s19, s23, s27, s31, s35, s39). The source carries eight reporters' notes, 'INSERT S4 JULIETTE' and 'Insert s15 juliette' to 'Insert s39 juliette', marking takes that were never inserted. At each point the debate resumes mid-sentence after '...' (in the speeches of Senators McClean, Adams, Hunte, De Peiza, Walcott, Husbands and Watson and in Senator McClean's reply), so parts of the debate appear to be missing. The notes are printed as in the source.

Q3. Order No. 1, Senator Adams. The paragraph labelled 'Mr. DEPUTY PRESIDENT' opens with the Chair's time warning but continues with what appears to be Senator Adams' speech ('Mr. Deputy President, in 1914, we had a very important person here in Barbados ... Dr. Akeem Styner'), and the next paragraph also seems to be his. Printed as in the source.

Q4. Order No. 1, after Senator Hunte's time warning. A passage on Barbados' road network ('more than 1 600 kms of public paved roads') is labelled 'Senator the Hon. D. W. BOYCE' with no call from the Chair; it follows the five-minute warning given to Senator Hunte and may belong to his speech. Printed as in the source.

Q5. Suspension for lunch. The motion is to suspend 'until 2.00 p.m.', but the question is recorded as 'suspend until 2.30 p.m.'. Printed as in the source.

Q6. Order No. 1, Leader of the Senate. One speech label reads 'SENATOR M.O.P. McClean'; elsewhere she is 'Senator the Hon. Miss M. P. O. McCLEAN'. Printed as in the source.

Q7. Opening. The opening reads 'on Wednesday, the December 7, 2016' and prayers were led by 'Reverend Cannon Errington Massiah'. Printed as in the source.

DEBATE SUMMARY

(Editorial summary — not part of the record.)

The Senate met in the Senate Chamber, Parliament Building, on Wednesday, 7th December, 2016 at 11.00 a.m., with Madam President, Senator Miss K. F. Ifill, in the

Chair; prayers were led by Reverend Canon Errington Massiah. The Leader of the Senate, Senator the Hon. Miss M. P. O. McClean, laid two Duties, Taxes and Other Payments (Exemption) Orders for University of the West Indies film festivals and the Child Care Board Financial Statements for the year ended March 31, 2015. She gave notice of Resolutions to approve Government guarantees of BDS\$12 million to be borrowed by Needham's Point Holdings Limited for renovations to the Hilton Barbados Hotel, and of a bond of up to BDS\$73 million arranged by ANSA Merchant Bank Limited for working capital for the Barbados Agricultural Management Company Limited.

The only Order was the Resolution that Parliament accept the Barbados Green Economy Scoping Study as a national information document, make it available to the public, laud the stakeholders and reaffirm its commitment to sustainable development. Senator McClean read the Resolution in full and explained the Study's definition of a green economy, its attention to transport, fossil fuels, renewable energy and efficiency.

Senator Prof. Emeritus Sir Henry Fraser called the 220-page Study a tour-de-force and spoke on agriculture and water harvesting. Senator the Hon. D. W. Boyce called it Step 1 and said the Government aimed to reduce energy use by about 30 per cent in the next decade or two, including through energy audits of hotels. After the luncheon suspension, with Mr. Deputy President in the Chair, Senator J. Ince described the Study as a business plan for Barbados, and Senator A. A. Adams spoke on environmental stewardship, the East Coast and carbon dioxide emissions.

Senator R. A. Hunte supported the document but lamented the state of the sugar industry and criticised politicians who visited St. Andrew and St. Joseph during the water problems without carrying water. Senator Carol Lady Haynes urged that everyone read the document. Senator Miss V. A. G. De Peiza recommended it but raised issues she did not see addressed, beginning with water harvesting. With Madam President again in the Chair, Senator Dr. J. X. Walcott called it extremely useful and answered criticism over the South Coast Sewerage Project, saying its document was signed in 1993 and construction began in 1995. Senator Dr. Sir Trevor Carmichael recalled support for the solar water heating industry in the 1970s and 1980s and spoke of green bonds.

After a short suspension until 5.45 p.m., Senator H. A. Husbands described green initiatives at the Samuel Jackman Prescod Polytechnic and the Barbados Community College. Senator J. A. Watson raised the accreditation of engineering degrees at the University of

the West Indies, and Senator the Hon. P. M. T. Todd linked the Resolution to the principles in the Prime Minister's message in the 2013 Manifesto. Senator McClean replied, and the Resolution was passed without division.

On the motion to adjourn sine die, Senator McClean offered Christmas greetings and thanks. Madam President invited Senators to 'Carols at Parliament' in the courtyard the next day and congratulated the 50th Anniversary Secretariat on the year's celebrations, and the Senate was adjourned sine die.