



SEVENTH NATIONAL ASSEMBLY

PARLIAMENTARY

DEBATES

(HANSARD)

(UNREVISED)

FIRST SESSION

THURSDAY 28 JULY 2022

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MAURITIUS

Seventh National Assembly

FIRST SESSION

Debate No. 23 of 2022

Sitting of Thursday 28 July 2022

The Assembly met in the Assembly House, Port Louis, at 3.00 p.m.

The National Anthem was played

(Mr Speaker in the Chair)

ANNOUNCEMENT**UNPARLIAMENTARY WORD – HON. S. NUCKCHEDDY**

Mr Speaker: Hon. Members, I have an announcement. I have checked the records of the proceedings following the point of order raised by hon. Assirvaden at the Sitting of Tuesday 26 July 2022. It cannot be ascertained whether hon. Nuckcheddy uttered the word complained of. However, hon. Nuckcheddy stated that he did utter the word “*kloun*”.

Hon. Members, I rule that the utterance of the word “*kloun*” to the address of a hon. Member is unparliamentary and I invite hon. Nuckcheddy to kindly withdraw same.

Mr Nuckcheddy: Mr Speaker, Sir, I apologise for using the word “*kloun*” towards hon. Dr. Gungapersad, for the behaviour he had.

Mr Speaker: Thank you.

PAPERS LAID

The Prime Minister: Mr Speaker, Sir, the Papers have been laid on the Table.

A. Ministry of Finance, Economic Planning and Development

The Economic Development Board and Protection Agreement (Republic of India) (Amendment) Regulations 2022. (Government Notice No. 188 of 2022)

B. Ministry of Social Integration, Social Security and National Solidarity

The Annual Report and Report of the Director of Audit on the Financial Statements of the National Solidarity Fund for the year ended 30 June 2021.

ORAL ANSWER TO QUESTION**AGALEGA ISLAND - FACILITIES - CONSTRUCTION**

The Leader of the Opposition (Mr X. L. Duval) (*by Private Notice*) asked the Prime Minister, Minister of Defence, Home Affairs and External Communications, Minister of Rodrigues, Outer Islands and Territorial Integrity whether, in regard to the facilities under construction on Agalega Islands, he will state –

- (a) if foreign military personnel will be present thereat once operational and, if so, how many;
- (b) the size of the two hangars/buildings for storage of aircraft;
- (c) if same will cater for Poseidon B737 anti-submarine aircraft and, if so, if this is in line with any bilateral agreement;
- (d) if it has been agreed not to allow nuclear powered vessels and nuclear arms thereat, and, if so, in what bilateral agreement and on what date;
- (e) if the port will be operated by Cargo Handling Corporation Limited and the airport by Airports of Mauritius Limited;
- (f) if residential quarters and dormitories are being constructed and, if so, the total bed capacity, and
- (g) if tender has been launched for the construction of 50 houses for the Agaleans and expected completion date thereof.

The Prime Minister: Mr Speaker, Sir, with regard to the facilities under construction on the island of Agalega, let me reiterate what I stated in my reply to a supplementary question following the PNQ of the Leader of the Opposition at our Sitting of Tuesday, this week, to the effect that we have always been giving full information to the House on the two projects, that is, the construction of the new airstrip and of the jetty. In fact, in past PNQs, PQs and numerous supplementary questions, we have already provided information on most, if not all, of the issues raised by the Leader of the Opposition in his present PNQ. Besides, Standing Order 22(1) (m) of the Standing Orders and Rules of the National Assembly provides as follows, and I quote –

“a question cannot be asked which renews or repeats in substance a question already answered(...)”

Mr Speaker, Sir, notwithstanding this *proviso* and in a spirit of transparency, I am providing, once again, the information sought.

Mr Speaker, Sir, with regard to part (a) of the Question, as I stated in my reply to the PNQ on Tuesday last, the facilities in Agalega will, after completion, be vested in the Government of Mauritius, which will determine the use thereof in compliance with the laws of the Republic of Mauritius. As obtains in the case of mainland Mauritius and Rodrigues, any request for use of our port and airport facilities by foreign civil or military vessel or aircraft is examined and decided upon by the Government. The same principle will apply for any such request for Agalega once the facilities are operational.

Mr Speaker, Sir, with regard to parts (b) and (c) of the Question, as I stated in my reply on Tuesday, I would like to reiterate that there is only one hangar under construction on the island. The other one is a shelter for parking of aircraft. The hangar and the shelter are of similar size, that is, approximately 55 metres by 53 metres. As I have already stated, the airstrip will be of 3,000 metres in length with associated aircraft movement area to facilitate operations of Boeing 737-900 and Airbus 321 or similar class of aircraft or smaller aircraft. Therefore, the associated infrastructures, including the hangar and the shelter, have also been designed accordingly.

Mr Speaker, Sir, I would here like to restate what I said in my reply to the PNQ on 16 June 2017, and I quote –

“I have just said that the initial plan was just to upgrade the airstrip. But after discussions, we have reviewed the whole project and we are looking especially at the very long-term development of Agalega. Therefore, I do not see anything wrong in coming up with the state-of-the-art airstrip that will be able to accommodate bigger aircraft. Let me take the example of Rodrigues. What is happening to Rodrigues right now? The request is now to review and to upgrade the landing strip because we can only accommodate, I think, ATR72 only. So, are we going to agree to spend millions of rupees to upgrade the airstrip and then, probably in years to come, we will have to seek other financial support to be

able to upgrade that upgraded strip? I think if we have the vision, if we are farsighted, then we should know what is best that we can do now for years and years to come.”

Mr Speaker, Sir, with regard to part (d) of the Question, I have clearly stated in this House previously that Agalega is not being transformed into a military base. I must say, Mr Speaker, Sir, that there is no bilateral agreement whatsoever to allow nuclear powered vessels and nuclear arms in Agalega. Government will stand guided by the provisions in the various Treaties to which we are a party.

In this connection, I would also like to inform the House that Mauritius is a party to several Treaties, including the Treaty on Non-Proliferation of Nuclear Weapons and the African Nuclear-Weapon-Free-Zone Treaty, commonly known as the Pelindaba Treaty.

The Treaty on Non-Proliferation of Nuclear Weapons was opened for signature in 1968 and entered into force in 1970. Mauritius ratified the Treaty in April 1969. The objective of the Treaty is to prevent the spread of nuclear weapons and weapons technology, to promote cooperation in the peaceful uses of nuclear energy and to further the goal of achieving nuclear disarmament and general and complete disarmament.

It is also noteworthy that Mauritius has signed an agreement with the International Atomic Energy Agency for the application of safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons.

Mr Speaker, Sir, insofar as the Pelindaba Treaty is concerned, it was opened for signature on 11 April 1996, and came into effect on 15 July 2009 after having obtained the required number of ratifications. Mauritius signed the Treaty on 11 April 1996 and ratified it on 24 April 1996. Mauritius joined the Pelindaba Treaty given our position and commitment to non-proliferation and commitment to promoting cooperation in the peaceful uses of nuclear energy. Since then, Mauritius has not changed its policy on the matter.

Under the Pelindaba Treaty, Mauritius has undertaken –

- (a) not to conduct research on, develop, manufacture, stockpile or otherwise acquire, possess or have control over any nuclear explosive device by any means anywhere (Article 3(a));
- (b) not to take any action to assist or encourage the research on, development, manufacture, stockpiling or acquisition, or possession of any nuclear explosive device (Article 3 (c)); and

(c) to prohibit, in its territory, the stationing of any nuclear explosive device (Article 4(1)).

However, Article 4(2) of the Pelindaba Treaty provides that, without prejudice to the purposes and objectives of the Treaty, each party in the exercise of its sovereign rights remains free to decide for itself whether to allow visits by foreign ships and aircrafts to its ports and airfields, transits of its airspace by foreign aircraft, and navigation by foreign ships in its territorial sea or archipelagic waters in a manner not covered by the rights of innocent passage, archipelagic sea lane passage or transit passage of straits.

Mr Speaker, Sir, with regard to part (e) of the Question, I would like to point out that the jetty infrastructure is meant for berthing and movement of ships of 149 metres length and drawing draught of 9 metres. As at now, it is not envisaged that the facility will operate as a full-fledged port. In any case, as I stated earlier, the facilities will eventually be vested in the Government of Mauritius, and their management and operations will be under the charge of the relevant authorities of the Government of Mauritius.

Mr Speaker, Sir, it should be brought out that, at present, the Mauritius Ports Authority has jurisdiction only over the ports of Port Louis and Port Mathurin as specified in the Schedule to the Ports Act 1998. Should the jetty in Agalega be eventually declared as a port, it would have to be included within the ambit of the Ports Act, through appropriate amendment to the Schedule of the Act. It would also require appropriate amendment to the Outer Islands Development Corporation Act.

Mr Speaker, Sir, insofar as the new airstrip is concerned, it will be managed by the Department of Civil Aviation as provided for under the Civil Aviation Act.

Mr Speaker, Sir, with regard to part (f) of the Question,...

Mr X. L. Duval: Which is not AML!

An hon. Member: *Ki AML to pe dir twa?*

Mr Speaker: Wait, wait! Let the Prime Minister...

(Interruptions)

There is no crosstalking! This is a PNQ, may I remind you? Please!

The Prime Minister: With regard to part (f) of the Question, I am informed that the residential quarters and dormitories are being constructed for use by the personnel who will be posted on the island and who will be responsible for the operations and management of these

new infrastructures. The residential quarters and dormitories will have a total bed capacity of approximately 140, which are being constructed near the airstrip area. Additional accommodation with bed capacity of 22 is being constructed near the jetty. Both take into account the future needs of the island in line with our long-term vision for the development of that part of our territory.

Mr Speaker, Sir, with regard to part (g) of the Question, I am informed by the National Housing Development Corporation (NHDC) that in January 2018, the Outer Islands Development Corporation (OIDC) sought the professional expertise and assistance of the Ministry of Housing and Land Use Planning for the construction of housing units in Agalega. Funds to the tune of Rs40 m. were provided in the Budget 2018-2019 for the construction of 50 housing units by the NHDC Ltd at Agalega. The contract for Consultancy Services was awarded on 08 May 2019 to Luxconsult (Mtius) Ltd for the sum of Rs6.25 m.

I am further informed that officers of the Ministry of Housing and Land Use Planning carried out a site visit at Agalega, together with officers of the NHDC Ltd and the Consultant, Luxconsult (Mtius) Ltd, in December 2021 to hand over sites identified for the housing project to the Consultant. Revised bidding documents and cost estimates have already been submitted by the Consultant to the NHDC.

The 50 housing units will be single-storeyed duplex type, concrete structure with corrugated iron sheet roof. 36 units will be located in the North Island at *Village Vingt Cinq* and 14 units in the South Island at *Village Sainte Rita*.

Each housing unit will have a net floor area of about 55.1 square metres and will consist of two bedrooms, one kitchen, one dining/living area, a combined toilet and bathroom, and a veranda.

Given that the existing roads in Agalega are mostly sandy and consist of coral, the same type of road of width 3 to 3.5 m will be provided within the housing estates. The housing units will comprise the following facilities -

- (i) individual rainwater harvesting system will be provided to each housing unit;
- (ii) two desalination plants will be constructed;

- (iii) electricity will be provided through generators. A common Photovoltaic System, including batteries and distribution board, will be provided to supply each duplex, and
- (iv) wastewater will be disposed of through individual septic tanks and absorption pits.

Mr Speaker, Sir, I am informed by the NHDC that the revised estimated cost of the project is around Rs347 m. as at 28 July 2022, exclusive of Management and Consultancy fees.

The estimated project time frame is as follows –

- (i) the bidding documents which have been received in July 2022 are expected to be submitted to the Central Procurement Board on 01 August 2022;
- (ii) the tender exercise will be carried out between September and November 2022;
- (iii) tender will be awarded in December 2022, and
- (iv) works are expected to start early 2023 and expected to be completed by December 2024.

Mr Speaker, Sir, we know that India has been assisting Mauritius all the way from our Independence to help us develop our economy, uplift and modernise infrastructure, improve community facilities and enhance the quality of life of our citizens. This has been possible thanks to our special relationship and partnership with India which have been consolidated over time by this Government.

We should show gratitude towards India, instead of casting suspicion over a genuine partnership. Thank you.

Mr X. L. Duval: Mr Speaker, Sir, I am casting suspicion on the Prime Minister. I will start, Mr Speaker, Sir, by reminding the House that when you pretend - I am not saying who - that you do not know something and it is obvious that this information is available, it is equivalent to misleading the House. And you will remember, Mr Speaker, Sir, that hon. Amber Rudd resigned as Home Secretary in the UK because she pretended she did not know something that was in her files. I will start with this, Mr Speaker, Sir. It is good that I mention it.

Now, as far as foreign military personnel that might be coming in the next few months to Agalega, and it also concerns the human resource plan for Agalega, the Prime Minister said, on Tuesday, that he was not yet aware of the human resource needs. Yet, the project, the airport is

88% complete; 12% left. What sort of Government is the Prime Minister running if he tells us that a project that is 88% complete, he is unable to tell us what are the skill sets required; what is the training required; what are the people in Mauritius who are willing to go there? Isn't this, Mr Speaker, Sir, all done on purpose so that at the time of opening, they will say there are no Mauritians available and it is all, in fact, staffed by foreign personnel? Why isn't there a proper human resource plan for Agalega?

The Prime Minister: Mr Speaker, Sir, I have already replied, last Tuesday, precisely to what the hon. Leader of the Opposition is mentioning; that at this time, it is still premature because the project is not going to be completed until next year. Of course, we shall have an assessment of the human resource requirement to man the airstrip and to man the jetty, and the needful will be done as usual, as we have always been doing with regard to any provisions that Government will have to make.

Mr X. L. Duval: Mr Speaker, Sir, he tried to get us confused between Mauritius Ports Authority and the Department of Civil Aviation. I am talking about operation. Who will operate the jetty? He has said no one will operate the jetty; apparently, it is just going to lair, just to look good. Who will operate the airport? And I mentioned AML, which, through a subsidiary, manages Rodrigues by the way. I am asking the Prime Minister whether AML, which is the sole airport operator, is going to manage the supposed civilian airport at Agalega, and if not, why not.

The Prime Minister: The Leader of the Opposition is confused. I understand he is confused, especially at this time. But, again, the authorities concerned will be mandated to take over and to manage those infrastructures.

Mr X. L. Duval: Mr Speaker, Sir, this is a question of sovereignty; this is a question of militarisation of one of our territories. So, the least I would have expected from the hon. Prime Minister is for him to come clean, and if necessary, we can come back to more PNQs; it is not a problem for me.

Now, I would like to ask the Prime Minister - it has been stated by the then Vice-Prime Minister and by yourself that there exists a bilateral agreement with India concerning maritime security and concerning Agalega. So, I would like to ask you a precise question this time. This bilateral agreement concerning Agalega, when was it signed and how long is it valid? For 5 years, 50 years, 100 years, a lifetime?

And secondly, what are the conditions? If ever someone, another Government wants to rescind that agreement, what are the conditions? So, what is the length of the agreement and what are the conditions for eventually resuming our full sovereignty there?

The Prime Minister: Mr Speaker, Sir, I can clearly see, when the Leader of the Opposition talks about it, that it is a question of the sovereignty of our country, clearly implying that we are giving away our sovereignty of Agalega. The people will judge this kind of attack not only against the State of Mauritius but also attacking India as a country, attacking India, because you are implying that we are giving sovereignty to India.

(Interruptions)

This is what you are saying.

Mr Speaker: Order on both sides!

The Prime Minister: But, anyway, we, of course, assume our responsibility. I have numerous times stated that the issue of sovereignty does not even arise. There is no question of giving any sovereignty to any other country for that matter. But now the Leader of the Opposition again wants to know about - he has put the same questions before, and I have answered, but he does not understand. He puts the same questions again. I have said that there is a confidentiality clause in this Agreement and I cannot, therefore, divulge the contents of this Agreement.

Mr X. L. Duval: Mr Speaker, Sir, when it is a question of sovereignty, we are allowed to doubt, as he has not given any information; it is all confidential. So, you cannot. I am not being accused of high treason, Mr Speaker, Sir. I am doing my work and I will continue to do my work. Whether he wants to bring it on a communal basis or not, I will do my work, and do not try to fan the communal flames. That is also a bit of advice I give you.

Now, I will do my work. I am asking you, the Agreement that was signed with India, how long is it for and what are the conditions attached to eventually ending the Agreement? This information, Mr Speaker, Sir, the Prime Minister owes it to the Nation.

The Prime Minister: Mr Speaker, Sir, I have never accused the hon. Leader of the Opposition of communal attacks. He is, of course, free to criticize us as a Government, but he is attacking the Government of India. He is attacking India as a Country. This is what I said, if he does not know the distinction! But maybe, I can feel *le naturel est en train de venir, c'est pour ça qu'il est en train de dire qu'on m'accuse d'être communal*. But, anyway, being communal, I

can give you examples of how communal your Alliance, this *l'Alliance de L'Espoir* has been. But, anyway, Mr Speaker, Sir, I repeat again that there is a confidentiality clause, and it is for both countries to agree whether we shall release the terms and conditions of the Agreement. So, there is a confidentiality clause and it has been agreed between the two countries that we are not going to release the terms and conditions of this Agreement.

Mr X. L. Duval: Mr Speaker, Sir, the Prime Minister is aware of tons, of dozens of articles in the Indian Press, mentioning all the times the Military Base. Our Embassy here, his Office here, has never raised one little finger to deny that, and now you accuse me of Indian bashing when you are being accused of high treason?

The Prime Minister: This is what you are doing!

Mr X. L. Duval: Now, I will tell you this, Mr Speaker, Sir.

The Prime Minister: This is what you are doing!

Mr X. L. Duval: I will tell you this.

The Prime Minister: Mr Speaker, Sir, on a point of order. Would the hon. Leader of the Opposition remove the accusation of high treason?

Mr X. L. Duval: I did not accuse anyone of high treason.

The Prime Minister: You said I am being accused.

(Interruptions)

Mr X. L. Duval: You are being accused!

Mr Speaker: So, ...

Mr X. L. Duval: He is being accused. I have not accused him. I have said he is being accused of high treason.

Mr Speaker: Honorable...

Mr X. L. Duval: Where have I accused you?

(Interruptions)

The Prime Minister: You said 'you are being accused' of ...

Mr X. L. Duval: Have I accused you of high treason?

Mr Speaker: Honourable...

Mr X. L. Duval: You don't understand English?

Mr Speaker: Hon. Leader of the Opposition!

Mr X. L. Duval: Yes!

Mr Speaker: You listen to me.

Mr X. L. Duval: Yes!

Mr Speaker: In spite of ‘hum’ or ‘ha’, I am on my feet and I am the Speaker.

Mr Speaker: You have said ‘you have been accused’.

Mr X. L. Duval: No, you are being accused.

Mr Speaker: You are being accused.

Mr X. L. Duval: Yes.

Mr Speaker: So, I order you...

Mr X. L. Duval: Sorry?

Mr Speaker: ... to remove that part of ‘being accused of high treason’.

Mr X. L. Duval: He is not being accused of high treason. I remove it.

Mr Speaker: Thank you very much.

Mr X. L. Duval: But other people are obviously accusing him. I do not know who they are.

(Interruptions)

Now, Mr Speaker, Sir, I want to ask the hon. Prime Minister, these are *bassesses* when you signed an Agreement in the name of the population for an undetermined period with a foreign power and you refuse, unlike Seychelles and everywhere else, to disclose that Agreement. That is, Mr Speaker, Sir, unacceptable, and I maintain it! It is unacceptable in a democratic country.

Mr Speaker, Sir, I am now going to go to the famous Boeing 737. Is the Prime Minister expecting commercial Boeing 737 to land in Agalega, and if he does not know, a commercial Boeing 737 takes 215 passengers incoming and outgoing 430 passengers? The airport, Mr Prime Minister, you said it yourself, caters for 50. So, what? There will be 300 people sitting in the garden, according to you, if you have commercial airplanes? Is that your planning, your vision for the future or are you, in fact, just not owning to the fact that these Boeings 737 are, in fact, Poseidon armed anti-submarine vessels? I am saying; I may not be against, I may not be for, but I need to know what is being signed in the name of the population of Mauritius.

The Prime Minister: Mr Speaker, Sir, the Leader of the Opposition started saying again that there have been numerous contracts or agreements that have been signed and that have been disclosed, and mentioning other countries. Instead of mentioning other countries, he should

mention any example of his, when he was in a Labour-PMSD Government, when questions were being asked in this same National Assembly with regard to the Jin Fei Agreement that was signed between the Government of Mauritius and the People's Republic of China. Did they disclose the terms and conditions of the contract? What was the answer that was given in this National Assembly?

He was a Senior Member of that Government which was saying that there is a confidentiality clause and that they cannot disclose; they cannot disclose the terms and conditions of this agreement. That was good at that time for him! Now he is taking exception to why is it that the terms and conditions of one Agreement are not being disclosed, because there is a confidentiality clause.

Mr Speaker, Sir, I have numerous times said that the airstrip ... of course, at that time, it was going to be upgraded, but, then, we decided that since we are getting grant money from the Government of India, we would like to have a much bigger airstrip so that it can accommodate bigger aircrafts for the future. And again, I repeat, any type of aircraft from any foreign country which wishes to use the facilities of the airstrip in Agalega, as it is done for Mauritius, will have to apply and will have to get our consent in order to be able to land and to use the facilities, and this is the same that obtains here.

In the past, under previous Governments, there have been requests for either civil aircrafts - numerous - or military aircrafts to land and to use the facilities of Plaisance Airport, which have been granted. I can quote, and, in fact, I have a list of all of them from various countries, like French military aircrafts. From 2014 to 2020, we have had 96 military aircrafts landing and using our facilities. For that same period, we have had 10 from the Indian Air Force, and we have had US military aircrafts.

So, it is not something which is new, exceptional, abnormal which is happening.

Mr X. L. Duval: Mr Speaker, Sir...

Mr Speaker: Time over by 3 minutes! Next item!

PRIVATE MEMBERS' MOTION
ELECTRIC VEHICLES IN MAURITIUS

Order read for resuming adjourned debate on the following motion of the hon. Third Member for Port Louis North & Montagne Longue (Ms J. Tour):

“This Assembly resolves that Government should continue its efforts to encourage the use of electric vehicles in Mauritius.”

Question again proposed.

Mr Speaker: Hon. Ittoo!

(3.35 p.m.)

Mr A. Ittoo (Third Member for Vacoas & Floreal): Merci, M. le président. À l’instant que je m’adresse à vous et je le redis sept mois après ma dernière intervention sur ce *Private Members’ Motion* de décembre 2021, l’homme le plus riche dans le monde est toujours nul autre qu’un fabricant de voitures électriques avec une fortune estimée à 244 milliards de dollars. Pendant plus de 20 ans, les plus riches hommes, femmes et *listed companies* évoluaient dans le monde de l’informatique ou des services en ligne. Des entrepreneurs ayant fait fortunes en profitant de la *Third Industrial Revolution*, notamment la révolution digitale des années 90-2000.

En même temps, M. le président, une autre réalité qu’on ne peut rester insensible ou indifférent est que la majorité des grands fabricants des voitures traditionnelles dites *internal combustion engine* se sont engagées à arrêter la production de voitures roulant à essence ou diesel d’ici 2030, voire 2035. Ils fabriqueront uniquement des voitures électriques peut-être même avant la date butoir. Tout cela, M. le président, pour venir vous dire qu’il est temps que nous pensons, que nous parlons sérieusement d’une transition à l’électrique plus verte dans l’environnement automobile mauricien.

Mr Speaker, Sir, despite supply constraints and COVID-19, there are actually almost 20 million passenger electric vehicles on the road; 1.3 million commercial electric vehicles, including buses, delivery trucks, vans, and over 280 million electric mopeds, scooters and motorcycles and this is from the Electric Vehicle Outlook 2022 on Bloomberg. We are in the middle of the biggest revolution in motoring since Henry Ford’s first line of production started in 1913, and it is likely to happen much more quickly than any of us here can imagine.

Mr Speaker, Sir, many industry observers believe that we have already passed the tipping point where sales of electric vehicles will rapidly overwhelm petrol and diesel cars. It is certainly what the world's biggest car manufacturers think. Yes, the fact that many governments around the world are setting targets to ban the sale of petrol and diesel vehicles gives impetus to the process, and yes, Mr Speaker, Sir, to ban on the sale of petrol and diesel vehicles.

The European Union Commission last year proposed to reduce to 100% CO2 emissions from new cars by 2035 making it impossible to sell fossil fuel powered vehicles in the European Union from the date 2035. The European Union insists that 2035 target is crucial and this is because the average lifespan of new cars is 15 years, and its ambition to reach net zero emissions by 2050 depends on that. And 2050, Mr Speaker, Sir, is the global milestone scientists believe we should not trespass in order to escape disastrous climate change. Mr Speaker, Sir, it is not chaos that we would want to leave to our children and the children of our children. I would like here to thank my colleague hon. Ms Tour for coming up with this Private Members' Motion which gives us a moment to ponder on what actions have been taken and what actions can be taken for a better future for our country. And Mr Speaker, Sir, most importantly, creating and leaving a legacy.

En parlant de *legacy* ici, M. le président, comme jeune parlementaire, je me suis intéressé à la classe politique dans l'histoire de notre pays et sa contribution jusqu'à Maurice 2022. *What's the legacy left by our political leaders? We have known independence under late Sir Seewoosagur Ramgoolam.* On a connu la lutte syndicale menée par l'honorable Bérenger dans les années 90. On a connu le fameux miracle économique sous feu Sir Anerood Jugnauth dans les années 80, qui en alliance avec feu Sir Gaëtan Duval, nous a légué le tourisme. Feu Sir Anerood Jugnauth reviendra pour jeter les bases pour une île Maurice intelligente avec la Cybercité à Ebène. On se rappelle bien comment certains pleuraient les quelques arpents sous la culture de canne à sucre à l'époque en disant l'éléphant blanc. On a connu sous l'honorable Premier ministre, Pravind Jugnauth, le projet métro qui a été discuté, rediscuté, et rediscuté depuis les années 90.

Et M. le président, comme jeune parlementaire, ce qui m'impressionne le plus, c'est le travail abattu par ces leaders politiques actuels et anciens Premier ministres qui ont travaillé pour l'unité de ce peuple dans la diversité. Cela je dois le préciser tout en respectant chaque religion.

L'île Maurice dans son ensemble leur sera toujours reconnaissante parce que le secret de notre succès réside dans notre stabilité sociale, économique et politique. À bon entendeur, salut !

M. le président, pendant son oratoire, l'honorable Osman Mahomed, nous a martelés avec son *pseudo legacy* à la Commission Maurice Île Durable créée en 2008. Par contre, en 2014, voilà ce que disait un porte-parole de la Plateforme Citoyenne, et je *quote* –

« Tout est resté au stade de déclarations. Le projet Maurice Île Durable semble se tourner majoritairement vers les solutions de maîtrise de l'énergie pour les foyers. »

Un célèbre océanographe, lui, disait des louables intentions restaient au stade de projets. Le projet Maurice Île Durable est resté une chimère ; personne n'y a vraiment adhéré. Mais, M. le président, le vrai *legacy* qu'ils voulaient nous léguer, c'est leur centrale à charbon qui leur était si cher.

Mr Speaker, Sir, on this side of the House, we are serious and we will remain consistent in our thoughts, words and actions. Mr Speaker, Sir, what makes the end of the internal combustion engine inevitable is technological revolution, and technological revolutions tend to happen very quickly. I believe there is a revolution coming and the revolution will be electric. For instance, let us look at the internet. By my reckoning, the electric vehicle market is about where the internet was around in the late 1990s and early 2000's. Back then, there was a big buzz about this new thing with computers talking to each other. Jeff Bezos had set up Amazon and Google was beginning to take over the lights of AltaVista, Ask Jeeves and Yahoo. Some of the companies involved had racked up eye-popping valuations. For those who had not yet logged on it, all seemed exciting but irrelevant. For them, it was how useful could communicating by computers be? And they were saying, after all, we have got phones.

But, Mr Speaker, Sir, the internet like all successful new technologies did not follow a linear path to world domination. It did not gradually evolve, giving us time to plan ahead. Its growth was explosive, disruptive and crushing existing businesses and changing the way we do almost everything. And it followed a familiar pattern known by technologists as the S-Curve. The idea that innovations start slowly, they are of interest to only the nerdiest of the nerds. Electric vehicle is on the shallow sloping bottom of that S here. For the internet, the graph started at 22:30 on 29 October 1969, when a computer in California made contact with another

computer in Stanford University a few hundred miles away. Mr Speaker, Sir, it is clear that the electrical revolution will come and change our lives as fast as the digital revolution.

Mr Speaker, Sir, in his intervention, hon. Osman Mahomed told us that electric cars are very expensive and for a country like Mauritius, which is now in a difficult economy situation, making the use of electric cars will have a huge impact on our import bill. Mr Speaker, Sir, that was only seven months ago. What we have seen in the meantime is massive improvements in motors that drive electric vehicles, the computers that control them, charging systems and car design. But the sea-change in performance that users have experienced is largely possible because of the improvement in the non-beating heart of the electric vehicles, that is, the battery. The most striking change is in prices. Just a decade ago, it cost around USD1000 per kilowatt hour of battery power; now it is nudging USD100. That is reckoned to be the point at which electric vehicles start to become cheaper to buy than equivalent internal combustion engines.

Mr Speaker, Sir, when you factor in the cost of fuel and servicing, electric vehicles need much less of that. And many electric vehicles are already cheaper than their petrol or diesel alternative. At the same time, energy density, that is, how much power you can pack in each battery continues to rise and they are lasting longer as well.

Mr Speaker, Sir, last year, the world's first battery capable of powering a car for a million miles was unveiled by Chinese battery maker called CATL. Companies that run big fleets of cars like Uber and Lyft are leading the switchover, because the savings are greatest for cars with high mileage. Today, the question is not whether consumers will adopt electric vehicles but actually how fast it will happen. For me, the answer is very fast. Like the Internet in the 1990s, the electric car market is already growing exponentially. Global sales of electric cars raced forward in 2030, rising by 43% to a total of 3.2 m. despite overall car sales slumping by a fifth during the coronavirus pandemic. That is just 5% of total car sales but it shows that we are already entering the steep part of the S.

By 2025, Mr Speaker, Sir, 20% of all new cars sold globally will be electric according to the latest forecast by Investment Bank UBS. That will leap to 40% by 2030, and by 2040, virtually, every new car sold globally will be electric. The reason is thanks to another curve, what the manufacturers call the 'learning curve'. And I will tell my friend, hon. Osman Mahomed, the more we make something, the better we get at making it and the cheaper it gets to

make. That is why PCs, kitchen appliances and, yes, petrol and diesel cars became so affordable. The same thing is what has been driving down the price of batteries, and hence electric cars.

Mr Speaker, Sir, we are on the verge of a tipping point, says Ramez Naam, Co-Chair of Energy and Environment at the University of California. He believes as soon as electric vehicles become cost competitive with fossil fuel vehicles, the game will be up. That is certainly what Tesla's self-styled techno-king, Elon Musk, believes. Only last month, he was telling investors that the Model 3 has become the best-selling premium sedan in the world, and he is predicting that the newer, cheaper Model Y would become the best-selling car of any kind and I quote what he says –

“We've seen a real shift in customer perception of electric vehicles, and our demand is the best we've ever seen.”

Mr Speaker, Sir, there is work to be done before electric vehicles drive their petrol and diesel rivals off the road. Most importantly, everyone needs to be able to charge their cars easily and cheaply whether or not they have a driveway at their home. And, Mr Speaker, Sir, that will take a lot of work and investment, but will happen, just as a vast network of petrol stations rapidly sprung up to fuel cars a century ago.

Even Dr. Fatih Birol, Director of International Energy Agency said it, and I quote –

“While they can't do the job alone, electric vehicles have an indispensable role to play in reaching net-zero emissions worldwide.”

M. le président, ma collègue, l'honorable Tour, nous a donné les chiffres représentant les émissions de CO₂ émanant de notre parc automobile local, roulant à essence et diesel. Les chiffres, malheureusement, parlent d'elles-mêmes. Le marché des véhicules électriques semble enfin se lancer à Maurice, lentement mais sûrement et cela ne fait que quelques années.

M. le président, selon l'étude « Mobilité et Entreprise » de l'agence Alphabet en Europe, trois personnes sur quatre utilisent une voiture pour se rendre au travail ou pour faire des déplacements professionnels. Une étude sur le comportement des utilisateurs explique que 51% des utilisateurs utilisent leurs véhicules par obligation ; 33.3% par souci de bien-être et 15.7% pour des raisons économiques. L'intérêt croissant pour la technologie des véhicules électriques repose sur une combinaison d'intérêts environnementaux, socio-politiques et économiques. Ces

trois facteurs, M. le président, suscitent un important soutien en faveur de l'adoption des véhicules électriques auprès du gouvernement de nombreux pays qui ont mis en place des politiques incitant à l'adoption des véhicules électriques. Par exemple, M. le président, la France a annoncé son intention d'interdire la vente de véhicules fonctionnant au gaz conventionnel et au diesel au cours des deux/trois prochaines décennies.

Aujourd'hui, tous les constructeurs automobiles de lancent dans la construction des voitures électriques. D'ici 2025, comme je l'ai dit, ils représenteront 30% des ventes de voiture. C'est un fait, la voiture électrique se trouve au cœur de la stratégie de décarbonation de plusieurs pays et cela, M. le président, devrait inclure Maurice. Elle apparaît comme une solution pour un avenir plus propre, plus respectueux de l'environnement et de la santé, générant moins de pollution atmosphérique et de nuisances sonores. Donc, se déplacer grâce à une voiture électrique peut avoir un impact important dans la lutte contre le réchauffement climatique.

De plus, M. le président, on constate une rapide baisse des prix à l'achat des voitures électriques boostée notamment par les différents *incentives* gouvernementaux et le fait que le coût de l'énergie est moins important que le diesel et l'essence. Une solution écologique et économique me direz-vous, M. le président. Il ne faudra plus longtemps avant que les voitures électriques deviennent accessibles à tout le monde. On ne peut qu'entrevoir les innovations du futur et toutes les objections pourront progressivement être écartées.

Mr Speaker, Sir, there were 10 million electric cars on the world's road at the end of 2020 following a decade of rapid growth. Electric car registrations increased by 41% in 2020, despite the pandemic-related worldwide downturn in car sales in which global sales dropped by 16%. Around 3 million electric cars were sold globally; a 4.6 sales share, and Europe overtook the People's Republic of China as the world's largest electric vehicle market for first time. Electric bus and truck registrations also expanded in major markets reaching global stocks of around 600,000 and 31,000 respectively.

The resilience of electric vehicle sales in the face of the pandemic rests on three pillars –

- (i) Supportive regulatory frameworks: even before the pandemic many countries were strengthening key policies such as CO2 emissions standards, zero-emission vehicle mandates. By the end of 2020, more than 20 countries had announced

bans on the sale of conventional cars or mandated all-new sales to be Zero-Emission Vehicles (ZEVs).

- (ii) additional incentives to safeguard electric vehicles sales from the economic downturn.

Mr Speaker, Sir, some European countries increased their purchase incentives and China delayed the phase out of its subsidy scheme and the number of electric vehicles expanded and the battery cost continued to fall.

Mr Speaker, Sir, vehicle manufacturers announced increasingly ambitious electrification plans. Out of the world's top 20 vehicle manufacturers which represented around 90% of new car registrations in 2020, out of these 20, Mr Speaker, Sir, 18 have stated plans to widen their portfolio of models and to rapidly scale up the production of light duty electric vehicles. The model availability of electric heavy duty vehicles is also broadening with four major truck manufacturers indicating an all-electric future. Consumer spending on electric car purchases increased to USD120 billion in 2020. In parallel, Mr Speaker, Sir, across the world, Governments spend 14 billion to support electric car sales up to 25% from 2019 and that is mostly stronger incentives in Europe.

Nonetheless, Mr Speaker, Sir, the share of Government incentives in total spending on electric cars has decreased over the past five years, suggesting that electric vehicles are becoming increasingly attractive to consumers. The near term outlook for electric vehicle sales is bright. In the first quarter of 2021, global electric car sales rose by around 140% compared to the same period in 2020, driven by sales in China of around 500,000 vehicles and in Europe 450,000 vehicles. US sales have more than doubled relating to the first quarter of 2020 albeit from its much lower base.

Mr Speaker, Sir, we have seen strong momentum in electric vehicle markets despite the pandemic. Existing policies around the world suggest healthy growth over this decade. In the stated policies scenario, the electric vehicles stock across all modes except, Mr Speaker, Sir, two three-wheelers which reach 145 million in 2030 accounting for 7% of the road vehicle fleet. Electric vehicle markets could be significantly larger if Governments accelerate efforts to reach climate goals. In the sustainable development scenario, the global electric vehicle fleet reaches 230 million in 2030. The expanding fleet of electric vehicles will continue to reduce well-to-

wheel GHG emissions with the net savings relative to internal combustion engines vehicles increasingly over time depending at the pace at which electricity generation decarbonises.

In 2030, in the stated policy scenario again, the global electric vehicle fleet will reduce GHG emissions by more than 1/3 compared to an equivalent high internal combustion engine vehicle fleet. In the sustainable development scenario, the level rises to 2/3. Electric vehicles are set to be a more common sight on the world's roads in the 2020s. Even with recent success of electric vehicles deployment reaching a trajectory consistent with climate goals is a formidable challenge. It requires stronger ambition and action from all countries and that includes Mauritius.

Advances in battery technology and mass manufacturing will continue to drive down the cost of EVs but the 2020s will need to see more than just mass adoption of electric light duty vehicles to meet climate goals. Mauritian Government as well will also need to put in place policies to promote the roll out of zero emission vehicles in the medium and heavy duty vehicle segments and the corresponding fast charging infrastructure. Yes, Mr Speaker, Sir, fast charging infrastructure.

À ce titre, M. le président, c'est avec beaucoup de plaisir que je note l'inauguration de deux bornes de chargement solaire de 7.4 kilowatts pas plus tard que hier par le groupe Leal et je reprends ce qui a été dit par le concessionnaire local –

« Les véhicules électriques sont la solution du futur. »

Mr Speaker, Sir, in the short term, countries can continue to implement, enforce and tighten measures such as CO2 and fuel economy standards and electric vehicle mandates. Taxing gasoline and diesel at rates that reflect their environmental and human health impacts can provide Government revenue, reduce their negative impacts and hasten the transition to electric mobility. Differentiation taxation of vehicle and fuel that reflect their environmental performance can further align markets with the climate benefits of electric vehicles.

In order for electric vehicles to attain their full potential to mitigate carbon emissions, critical progress is required to decarbonise electricity generation to integrate electric vehicles in power system to build charging infrastructure and to advance sustainable battery manufacturing and their recycling. Mr Speaker, Sir, policies need to leverage momentum to further accelerate electrification.

M. le président, les voitures électriques sont de plus en plus utilisées tout autour du monde et selon l'Agence Internationale de l'Énergie, il devrait y avoir plus de 300 millions en circulation après 2040. Sur la voie de l'électrification, la compagnie UPS vient d'annoncer un partenariat avec Workforce pour la construction de 35,000 fourgons électriques pour étoffer sa flotte de véhicules de livraison car dorénavant, il est de plus en plus facile de recharger ce genre de véhicules.

La problématique, M. le président, de la recharge est primordiale car, à l'heure actuelle, le pétrole utilisé par les moyens de transport, 95% d'essence, de diesel et de kérosène représentent un tiers de nos ressources primaires. M. le président, le seul moyen de réduire clairement la consommation de pétrole est de remplacer les véhicules à moteur à combustion par des moteurs électriques, sans quoi, il sera impossible de contrer les effets les plus néfastes du changement climatique. Mais ces véhicules électriques doivent être alimentés par une énergie propre, c'est-à-dire, qui n'est pas produite à l'aide de ressources fossiles ; sinon, ils seront tout aussi polluants que les véhicules conditionnels. Cela a été dit par l'honorable Tour et l'honorable Osman Mahomed et je suis d'accord. Aujourd'hui il y a plus d'un milliards de véhicules à combustion internes en circulation dans le monde et 100 millions supplémentaires seront produits chaque année.

M. le président, nous en compterons donc, plus de 2 milliards en 2040, surtout si les inégalités énergétiques mondiales se réduisent alors que 90% des voitures devraient être électriques si nous souhaitons diminuer les émissions de CO2 du secteur des transports. Donc, M. le président, 300 millions des véhicules électriques, cela ne suffiras pas à inverser la tendance malheureusement.

M. le président, de nombreux pays se sont déterminés à interdire les véhicules dotés de moteurs à combustion interne, notamment l'Angleterre, l'Allemagne, la France, la Norvège, même la Chine. Cette dernière est le pays le plus important car il a besoin de plus de voitures et il fabrique plus de voitures électriques que les autres pays mis bout à bout. À Norvège, M. le président, et en y reviendra sur la Norvège, affirme qu'elle interdira la vente de véhicules consommant des combustibles fossiles en 2025. Dans 3 ans, M. le président, alors que les autres gouvernements visent 2040. C'est très bien mais c'est peu probable, étant donné les limites de la

croissance de la production de véhicules électriques, la nécessité de meilleures batteries et le prix de lithium qui s'envole depuis quelques années.

M. le président, par ailleurs, les voitures électriques sont plus faciles à fabriquer et à entretenir. Je l'ai dit, ces dernières ne comptent qu'une vingtaine de pièces mobiles contre 2,000 pour les véhicules classiques. Selon les chercheurs, James Arbib et Tony Seba, les voitures électriques peuvent faire plus de 300,000 km en ne changeant que les pneus. Par exemple, une Tesla S a fait plus de 800,000 km avec la même batterie.

Et, M. le président, à ce titre je note avec satisfaction l'inauguration, en décembre, d'une deuxième batch de 14 MW, un système de batterie BESS (*grid-scale Battery Energy Storage System*) et je félicite, d'ailleurs, le ministre des Utilités publiques, l'honorable Lesjongard, son équipe et la CEB pour arriver à ce *milestone* important dans notre transition énergétique. Et j'apprends, M. le président, avec beaucoup de plaisir, l'achat et l'installation d'un système de batterie additionnelle de 22 MW pour très bientôt. Cela démontre, M. le président, encore une fois, le sérieux de ce gouvernement pour un développement durable tout en respectant ses engagements.

Mr Speaker, Sir, COVID-19 has effectively impacted our everyday life, businesses and the way we think about the future. Likewise, COVID-19 has affected almost all aspects of transportation. For the public sector, economic shutdowns have gutted the tax revenue needed to buy and maintain Government vehicle fleets. Perhaps, no municipal entirety has been hit harder than public transport agencies which have seen ridership plummet by up to 97%. Some transit operators are close to bankruptcy, while some services may face permanent closure.

For the private sector, Mr Speaker, Sir, COVID-19 has increased interest in the private vehicle use, as consumers feel safer and more protected from the virus in cars than they do in public transit. Mr Speaker, Sir, people are not only grabbing their keys instead of transit passes, but those who never had keys to begin with are now considering a vehicle purchase. I am talking here about the trend in Europe, Mr Speaker, Sir. These are troubling trends that threaten the fundamental tenets of sustainable mobility. Improved mass transit and reduced private vehicle use, public transportation is fundamental for creating efficient and sustainable cities, and cities should continue to prioritise public transit over private vehicles.

Mr Speaker, Sir, however, private vehicles are unlikely to ever disappear, and those which are purchased should be electric. Through the right policies and investments, local governments can encourage consumers to make the right choice while also expanding their own electric vehicle fleets and growing their economies.

Mr Speaker, Sir, four reasons to invest in an electric vehicle now, given the issues posed by COVID-19. Now is the perfect time for vehicle owners and operators to invest in electric vehicles, especially electric buses. Accelerated electric vehicle adoption during the pandemic will spur the economy. The International Labour Organisation estimates more than 14 million workers have been adversely affected by the pandemic, just in the United States and Europe.

1. Procuring more electric vehicles and building infrastructure can immediately create jobs and spur sustained economic activity.

The United States alone is projected to need 330,000 public charging outlets and a total of roughly USD 4.7 billion in electric vehicle infrastructure investment by 2025. Although job growth will likely come from sectors outside the rapidly automating vehicle manufacturing sector, several studies conclude that electric vehicles will provide a net benefit to total job growth, with estimates noting up to 2 million new jobs by 2030 in the charging and maintenance sectors and elsewhere.

Mr Speaker, Sir, there is no better investment to spur economic activity than one that requires large upfront investment and provide long-term cost savings.

2. Save money.

Despite their large upfront costs, electric vehicles can have a cheaper total cost of ownership and save money in the long term. One recent study showed that the ownership cost of e-taxis will be less than conventional taxis after as little as 4 years' use. Bloomberg estimated that e-buses started to produce a lower cost of ownership than diesel buses by 2018, assuming that the bus drives at least 160 km a day. These cost savings can help governments and companies build their emergency funds and wither operational deficits during times of crisis or low demand.

3. Create new revenue streams in emergencies and times of low demand.

There are additional uses and revenue streams associated with electric vehicles, especially those with big batteries such as buses, delivery vehicles and municipal trucks. In times of crisis or low demand, heavy duty electric vehicles or an aggregated network of smaller batteries can be used to provide stable electricity to hospitals and other essential services through vehicle to grid solutions. This is the future, Mr Speaker, Sir. For example, in Virginia, Dominion Energy expects to replace 50 diesel buses with electric vehicles by end of 2020, extending to more than 1,000 vehicles by 2025, with the State's approval. When the plan is fully implemented, the batteries in the bus fleet could store up to 105 MW hours of electricity, enough to power more than 10,000 homes. This builds on a pilot project led by the University of Delaware, where electric cars ended up generating more than 1,000 dollars per car per month.

4. Retain local air quality improvements.

Mr Speaker, Sir, over the course of COVID-19 shutdown, air pollution dropped by almost 60% in many cities. Electric vehicles have no tailpipe emissions, emit less heat and produce less noise compared to conventional vehicles. Prioritising electric vehicles adoption now would help retain air quality improvements and lower health risk in communities.

Mr Speaker, Sir, these benefits can be further improved by using electric vehicles to improve renewable energy integration. For example, solar energy produced during the daytime can be used in electric vehicles and used later by selling it back to the grid.

Mr Speaker, Sir, how can Government support more electric vehicles? Obviously, electric vehicles, especially large shared electric vehicles such as buses are a great way to push the economy forward in the wake of COVID-19. While the approach may differ by region, there are three main steps that governments can take to support both public and private electric vehicle deployment –

- (i) Grow charging infrastructure. Lack of charging infrastructure is a key barrier to scale electric vehicles. Accelerating its deployment not only provides confidence to consumers in overcoming perceived ranged anxiety; it also creates the essential infrastructure linkage with the electricity grid. Smart charging infrastructure will also help in managing the electric load on the grid and use electric vehicles as energy storage resources. By focusing on the widespread deployment of public

charging infrastructure and incentivising workplace charging, this investment, Mr Speaker, Sir, will have sustained positive outcomes.

- (ii) Support electric vehicle purchases in COVID-19 relief packages. Whether from national governments or from international institutions, many cities and countries will likely be eligible for post COVID-19 stimulus in the months to come, in the years to come.

Governments should prioritise these funds towards actions which will create cascading economic growth in the short term, save money in the long term and provide environmental co-benefits.

Mr Speaker, Sir, purchasing electric vehicles especially buses and other high mileage shared vehicles is one concrete way to achieve all these three goals. Mr Speaker, Sir, policymakers should craft stimulus packages that subsidise the purchase of electric vehicles and their corresponding charging infrastructure, such as Germany's 15 billion Euros stimulus package. This package aims to accelerate electric vehicle adoption by increasing subsidies on vehicles purchased, lowering taxes and scaling charging infrastructure.

- (iii) Implement Emission Standards and EV Mandates.

Mr Speaker, Sir, to assist the efforts to develop charging infrastructure and structure stimulus packages, policymakers should also put in place laws to solidify the long term push to electrification. Worldwide, vehicles standards and mandates have proven to be effective policy tools to mitigate greenhouse gases for the transport sector and support electric vehicle adoption and migration.

For example, Mr Speaker, Sir, in Mexico, a vehicle efficiency standard reduced carbon dioxide emissions by an estimated 30 million tons from 2013 to 2017 improved the overall efficiency of the country's vehicles by close to 11% and set the stage for future electric vehicle adoption.

Mr Speaker, Sir, zero emission vehicle mandates have also proven effective in increasing electric vehicle purchases, as evident by successful programmes in California and China. Such policies spur supply chains for clean vehicles and can

bolster charging infrastructure plans and stimulus money, dramatically hastening the pace towards electrifying vehicle fleets.

Mr Speaker, Sir, building back with better electric vehicles. Electric vehicles can help a more environmentally and financially sustainable post-COVID-19 world. Despite the destructive and painful nature of the pandemic, it also offers a once-in-a-century opportunity to pause business-as-usual vehicle production and shift towards a clean economical and electric future.

Mr Speaker, Sir, when we talk of electric vehicles, we often think of only cars. Another segment, where carbon emissions can be significantly reduced is that of micro mobility industry, those lightweight vehicles such as bikes, bicycles, mopeds, electric scooters and why not *trottinettes* and, Mr Speaker, Sir, electric micro mobility surged in the second half of 2020, one of the consumer trends that accelerated during the COVID-19 pandemic, further boosted by the construction of bike lanes and other measures to promote mobility. Sales of private e-bikes in the United States, Mr Speaker, Sir, more than doubled in 2020, outpacing sales of all bikes which were up an already healthy 65%.

Mr Speaker, Sir, many shared micro mobility operators reduced or suspended services during the height of the second quarter of 2020 COVID-19 lockdowns. But as confinements were eased, services rebounded strongly with 270 cities worldwide re-launching operations. As of February 2021, around 650 cities have shared micro mobility services. In Europe, e-scooter services have increased rapidly with more than 100 cities adding operations since July 2020.

Mr Speaker, Sir, preliminary data from operations indicates average trip distances on e-scooters have increased by around 25% relative to before the pandemic. Operators are increasingly offering more powerful e-bikes with plans to expand into electric mopeds which could further displace longer trips currently completed by car or public transit.

Mr Speaker, Sir, several major operators are introducing swappable batteries to improve operational efficiency and reduce emissions. Although the use of swappable batteries increase the number of total batteries needed to support a fleet, it can significantly reduce operational emissions and enable longer lifetime of vehicles.

Mr Speaker, Sir, privately owned electric two/three wheelers which includes motorised vehicles such as motorcycles, mopeds are concentrated in Asia, with China accounting for

around 99% registration. The global stock of electric two/three wheelers is now around 290 million and electric two/three wheelers account for one third of all two/three wheeler sales. Mr Speaker, Sir, while current sales are dominated by Asia, the market is going rapidly and in Europe, rising by 30% in 2020, benefitting from a wider model availability and continued incentives.

Mr Speaker, Sir, by reducing the consumption of oil products, electric vehicles uptake lessens the amount of revenue that Governments derive from fossil fuel taxes. This is the truth which is not fully compensated by the levies on the increased electricity use. The net tax loss is mainly due to lower overall energy consumption - EVs are two to four times more efficient than a Comparable Internal Combustion engine vehicles - rather than different taxation levels of electricity or oil products.

Mr Speaker, Sir, while this effect on Government tax take is limited today, by 2030 the global electric vehicle fleet might imply a net fuel tax loss of around USD40 billion in the stated policy scenario and USD55 billion in the sustainable development scenario. Mr Speaker, Sir, Government should anticipate this trend and design mechanisms that enable continued support for electric vehicles deployment while at the same time limit their revenue impact.

In the short term, Mr Speaker, Sir, existing taxation schemes should flexibly adapt to changes in the fuel market. For instance, taxes on oil products should adapt to maintain the overall revenue from fuel taxation despite a net decline in use. However, these short term measures cannot be protracted in time, as they risk creating distortions and, of course, raising equity issues.

Mr Speaker, Sir, in the long term, the stabilisation of tax revenue, important to support investment in roads and other transport infrastructure, is likely to require deeper reforms in tax schemes. Mr Speaker, Sir, these could include coupling higher taxes on carbon intensive fuels with distance-based charges. Mr Speaker, Sir, however, it is also important to note that widespread electric vehicle adoption will reduce air pollution, offsetting lost tax revenue by reducing health damages and their associated costs. Mr Speaker, Sir, measures are needed to balance reduced revenue from fuel taxes associated with electric vehicle uptake.

Mr Speaker, Sir, the one nation that stands out when it comes to electric vehicle adoption is Norway and it is important we talk about it because it is by no coincidence that Norway leads

the world in electric vehicle penetration. The shift did not happen overnight but the speed of transition here has surprised everyone. Almost 65% of new passenger cars sold in Norway in 2021 were electric. In addition, Mr Speaker, Sir, 22% were plug-in hybrids. Put differently, only 14% of new cars were sold without a plug in Norway lately.

Mr Ittoo: Now that there are many models to choose from and the range has improved, electric vehicles are purchased all over the country. And, Mr Speaker, Sir, it took them only 10 years to move from 1% to 65% and next year it is believed they will go to 80%. The US, other governments and Mauritius should use the 2022 to enact policies that incentivise a similar shift.

So, Mr Speaker, Sir, how did Norway become the world's top-selling electric vehicle market per capita? Not only because of suitable conditions, definitely not because Norwegians are more environmentally friendly or concerned about climate change than the rest of the world or than us. We can instead credit strong demand-side policies kept in place for a long time. After all, it takes time to electrify all the cars on the road. Mr Speaker, Sir, most cars are purchased second hand and people in the second hand market are dependent on the choices made by new-car buyers. And Mr Speaker, Sir, the Government in Norway therefore taxes the sales of new polluting cars heavily but does not tax electric vehicles at all, making electric vehicles, which are more expensive because of the production cost and I have said electric cars cost is going to be almost the same very shortly, a competitive and more appealing option. And here, Mr Speaker, Sir, I would like to thank the hon. Minister of Finance, Dr. Padayachy for removing all duties on all electric cars and hybrid vehicles in his last budget exercise.

The Norwegian Parliament has also decided that all sales of new cars and vans shall be zero emission by 2025. The faster we get to 100% electric vehicle new sale, the faster we get there with all cars on the road. *Et, M. le président, petite précision que je voudrais ajouter- on a entendu souvent parler du « oil curse » martelé par certains et bien vous serez surpris de savoir que la Norvège est une nation verte bâtie sur le pétrole avec ses immenses réserves de gaz naturel et de pétrole, son energy mix comprend 90 % d'énergie verte renouvelable. Et la Norvège reste un pays les plus riches d'Europe.*

And, Mr Speaker, Sir, how did they do it? Government policy has been key. The speed of the transition correlates closely with government policy and incentives for purchasers. In Norway, the secret to accelerate uptake of electric vehicles is to make them cheap enough.

Norway lowered the taxes in electric vehicles to keep the price down and even exempted road tolls as an extra incentive. This, Mr Speaker, Sir, has already been implemented to a certain extent in Mauritius like I said. Mr Speaker, Sir, the opposite approach was to raise taxes on traditional cars – a kind of pollution tax. In Norway, this included a 25% VAT tax, a carbon tax close to 20%, and smaller amounts for weight tax, and a car scrapping fee. Driving distances are relatively short in Norway and this is an advantage for electric vehicles which could also be the case for Mauritius.

Second reason, Mr Speaker, Sir, is a supply of renewable electricity. Norway's energy mix consists mainly of renewable sources. Mauritius ambition is to produce 60% of its energy needs from renewable sources by 2030. Norway's advantages are –

- (1) electricity which is already decarbonized, and
- (2) beneficial national policy provides incentive to EV buyers.

And, the Norwegian government came up with a series of electric vehicles incentives. Some of them which I would like to share with you, Mr Speaker, Sir –

- No purchase or import taxes on EVs since the 1990s;
- Exemption from 25% VAT on purchase since 2001;
- No annual road tax since 1996 until last year. It is a reduced road tax from 2021;
- No charges on toll roads or ferries from 1997 to 2017;
- Free municipal parking;
- Access to bus lanes;
- New rules allowing local authorities to limit the access to only include electric vehicles that carry one or more passengers;
- 50 % reduced company car tax;
- Exemption from 25% VAT on leasing, and
- Fiscal compensation for the scrapping of fossil vans when converting to a zero-emission van.

This is what we are seeing in Norway and in other parts of the world.

The European Union is negotiating yet another law requiring countries in the European Union to install millions of vehicle chargers this decade. And in the U.S., it has already started!

President Biden's Infrastructure Bill includes USD 7.5 billion for a nationwide charging network. But the U.S. can go further in 2022 as can other countries and implement policies directed at the demand side.

Mr Speaker, Sir, this can be done in different ways. The key is to start taxing new sales of at least the most polluting car models and use this money to subsidize electric vehicles. This is a fair way to implement climate policies as it is aimed at people buying a new car, rather than an indiscriminate tax at the gas pump. Mr Speaker, Sir, consumers are given an option when buying a new car. They could, for instance, choose a model with lower emissions like a plug-in hybrid, which is not taxed, or even an electric vehicle which is subsidized. To be clear, tax policies on purchase alone won't get there. We need to be fast enough. In Norway, for example, there are also several incentives in place which I have already gone through.

Mr Speaker, Sir, yes, the transition to electric vehicles might be more politically difficult in some countries than others, but several countries like Sweden and New Zealand have already started, with good results after implementing electric vehicles tax policies. And, Mr Speaker, Sir, new markets are also helped with better technology and massive investments in electric mobility. In fact, Mr Speaker, Sir, some countries are moving even faster than Norway. While Norway took 2.5 years to move from 2% to 10% EV market share, UK took 1.5 years and Germany only one.

2022 is also the year that all governments should join the first 38 countries that signed the COP26 declaration on accelerating transition to 100% zero-emission on cars and vans. It states that they will work toward the sales of new cars and vans being zero emission globally by 2040, and by no later than 2035 in leading markets.

Mr Speaker, sir, Mauritius has a history of being an *avant-garde* nation in the Sub Saharan African region, by daring early ventures in fields like high quality textiles, tourism, offshore banking, ICT, and now advanced biopharmaceutical manufacturing, which resulted to the unimaginable success of our small island. Mr Speaker, Sir, the new emerging electric vehicle industry is, in my humble opinion, the next wave not to miss to the next phase of our development because, Mr Speaker, Sir, we are not only talking here of cars but intelligent software controlled cars with artificial technology with research ongoing for autonomous capabilities in the near future.

Mr Speaker, Sir, for example, Apple's new car Chief, Kevin Lynch is pushing to launch fully self-driving electric cars only four years from now. Autonomous Electric Vehicles (A-EVs) use artificial intelligence, next-generation batteries and other Fourth Industrial Revolution (4IR) technologies and could transport passengers more efficiently without the need for drivers or fossil-fuel-driven Internal Combustion Engines (ICEs).

Mr Speaker, Sir, given the advantages of cleaner and quicker transport, A-EVs, Artificial Intelligence Electric Vehicles, could potentially accelerate much-needed greenhouse emission reduction in the transport sector. Our Low-Carbon Economy Index 2017 highlights the considerable gap between current decarbonisation efforts and the Paris Agreement's goal to limit warming to 2°C. Mr Speaker, Sir, this transition gap emphasises the need for immediate action and indicate a number of risks and opportunities for businesses. And, Mr Speaker, Sir, these include: market, technology, and policy disruptions that could bridge the gap to 2°C, but present a substantial risk to a number of sectors. A-EV technology is one example of such disruption.

Mr Speaker, Sir, what can governments do to boost their countries' rate of electric vehicle adoption? Norway's Climate and Environment Minister, Sveinung Rotevatn, has been very blunt about it: it is all about convergence of better vehicle performance and lower prices. Yes, Mr Speaker, Sir, –

“Money talks, and I don't think you can reasonably expect people to sacrifice their family's economy to save the environment. People do want to make an effort for the environment, but your wallet matters and most aren't willing to spend 10,000, 20,000 or 30,000 euros extra on buying a car – that's the simple truth,” says Mr Sveinung Rotevatn.

M. le président, si un environnementaliste, un écolo, un activiste vert achète une voiture électrique, il n'y a rien d'impressionnant. Mais quand des gens qui ne croient pas dans le changement climatique achètent des véhicules électriques, cela demande à être célébré. Et c'est là la seule façon de ralentir le réchauffement planétaire ; de le rendre profitable aux consommateurs, *and government has a key role to play here.*

My point here, Mr Speaker, Sir, is as evolving technologies shape the world with the Internet of Things, blockchains, cloud computing, data analytics and artificial intelligence, Mauritius has been active in setting the pace in the African region, having even been ranked the leader in Africa in the ICT sector. As we ambition to strengthen and broaden ICT as a pillar of

our economy, we are condemned - yes, Mr Speaker, Sir- we are condemned to be the first movers in adopting and vulgarising technologies of the future.

Furthermore, Mr Speaker, Sir, this will not only place Mauritius in a better position from any arising business and commercial opportunities for the region, but also prospect the highly qualified. The electric vehicle industry comes with a lot of opportunities; these are not only restricted to manufacturing of electric cars. Yes, we have missed the potential for the industry of manufacturing of conventional cars in Mauritius, but building electric cars is another industry we could target.

Other business opportunities, Mr Speaker, Sir, –

- infrastructure design and setup that include charging stations;
- software development;
- training and skill development;
- retrofitting;
- fleet operation;
- dealership and franchise,
- maintenance and repair.

Mr Speaker, Sir, these are all new opportunities that will arise with the electric vehicle industry. The IEEE report suggests that –

“It also remains to be seen whether a compelling case for the electric vehicles can be made to customers still worried about cost range and recharging infrastructure, not to mention their hesitancy to spend much for autonomous driving abilities. Government investment and incentives like those proposed by the Biden Administration or in China, or in the European Union or even in Russia, may help overcome some of these concerns and if the electric vehicle market grows slower than predicted or hoped for, there may be a lot of lost bets. Paradoxically, if the electric vehicle market grows faster than predicted, electric vehicles like laggards could be wiped out.”

Mr Speaker, Sir, we cannot afford to be a laggard in that race.

M. le président, nous avons déjà notre *10-year Electric Vehicle Integration Road Map* depuis 2020, et je dois admettre qu’il a fait un travail formidable en identifiant le contexte local,

technologique, des challenges et en proposant des scenarios de transition. M. le président, il existe un comité interministériel qui se penche sur l'adoption des véhicules électriques. Ce même comité, comme l'a bien expliqué l'honorable Ms Tour, a fait des propositions pour que la flotte de véhicules du gouvernement des cadres *senior officials* soient converti en véhicules électriques.

On dit que l'essayer, c'est l'adopter. M. le président, je soutiens pleinement cette proposition qui je pense aidera à vulgariser les véhicules électriques, aidera à réduire les hésitations come le *range anxiety*, et en même temps, changer le paysage automobile sensiblement.

Dans sa deuxième réunion, le *Electric Vehicle Implementation and Monitoring Committee*, tombant sous le comité interministériel, viendra avec des plan d'actions à 4 volets –

(i) *Facilitating the setting up of the charging network.*

On ne finira pas de le redire, M. le président, le déploiement rapide d'un *charging network island wide* sera déterminant pour une future adoption de véhicules électriques par des acheteurs potentiels.

(ii) *Financial incentives and green loans.*

Le gouvernement, à travers des banques et des plans de soutien, a déjà fait un travail dans ce sens. Et cela, M. le président, devrait continuer.

(iii) *National battery plan*, présidé par la MARENA.

M. le président, nous réalisons tous que les batteries ont une durée de vie limitée et que la gestion des batteries inutilisables par les véhicules électriques doit être soigneusement planifiée.

Il existe déjà des processus appropriés pour le recyclage industriel des batteries de véhicules électriques dans différents pays. Cela signifie que des matières premières telles que le cobalt, le lithium, l'aluminium et le cuivre peuvent être récupérées. Une autre possibilité, M. le président, pourrait être l'utilisation dite *2nd life* des batteries, par exemple, en tant que batteries statiques servant à stocker l'électricité à la maison. Après tout, une batterie n'est généralement pas cassée après 200, 000 kilomètres, M. le

président. Seule sa capacité de stockage diminue, mais cela est moins important pour le stockage stationnaire de l'électricité que pour la voiture.

(iv) *Awareness and training.*

Cela est présidé par *Business Mauritius*. Comme déjà mentionné, M. le président, la vulgarisation des technologies de véhiculés électriques pour les utilisateurs et même les sociétés engagés dans l'importation, commercialisation, maintenance, réparation et recyclage a toute son importance, car sans ces *stakeholders* cruciaux, la révolution électrique ne se fera pas d'où l'importance d'une coordination de l'État.

Furthermore, Mr Speaker, Sir, may I suggest that additionally, we could consider free personalised number plates for electric vehicle owners; further fiscal incentives to swap from an Internal Combustion Engine to a Battery Electric Vehicle Engine; scrapyards to cater for all the vehicles; *inclure dans les plans de design des maisons, bâtiments commerciaux, bureaux et autres centres commerciaux, des infrastructures pour la recharge.*

Je voudrais, avant de terminer, M. le président, faire un appel pour que ce comité interministériel soit composé non seulement des représentants des ministères de l'Énergie, de l'Environnement, du Transport, des Finances, et de la Fonction publique, mais aussi des technologies de la TIC, des infrastructures publiques, des experts en la matière, de la *MRIC (Mauritius Research and Innovation Council)*, des professionnels de l'industrie de l'automobile, et des chercheurs l'Université de Maurice. M. le président, avec pour but de mettre sur pied un plan de transition afin de devenir le prochain Norvège de l'Afrique.

M. le président, nous pouvons et nous devrions aspirer à devenir le premier pays *fully electric-driven* de l'Afrique. Cela n'aura pas que des avantages écologiques, mais aussi économiques, financiers et pratiques.

To conclude, Mr Speaker, Sir, frankly, I do not think any manufacturer will produce cars with internal combustion engines after 2035. This is my humble opinion, still, I cannot stress enough the fact that transition to electric vehicles must be fast and strong policies are urgently needed.

Mr Speaker, Sir, the United Nations' last climate report was called 'Code Red for Humanity'. We are in a hurry when it comes to cutting emissions. So, when there are alternatives that are more than good enough, why not speed things up?

Je ne vais pas être aussi alarmiste et pessimiste que Jeff Bezos, patron d'Amazon, celui qui était l'homme le plus riche avant d'être détrôné par Elon Musk. Ce même Jeff Bezos prédit que très bientôt la planète terre ne pourra plus supporter ces milliards d'habitants à force qu'on y engendre pollution, dégâts sur l'écosystème. Actuellement, M. le président, il investit sa fortune dans des recherches pour coloniser l'espace stellaire en prévoyant qu'un jour l'homme habitera dans l'espace et que planète terre sera devenue un *natural resort* que seul les plus fortunés pourront visiter. Nous n'en sommes pas là, M. le président, et Dieu merci.

M. le président, chacune de nos actions d'aujourd'hui compte et le prix sera payé par les générations futures. M. le président, le *motto* de mon parti, le Mouvement Socialiste Militant (MSM), a été 'unir pour bâtir'. Avec l'évolution, nous nous adaptons aux exigences du présent, plus précisément les exigences Climatiques, et aujourd'hui pour nous c'est s'unir pour bâtir l'île Maurice de demain, une île Maurice verte, durable et écologique.

Merci, M. le président.

Mr Speaker: I suspend the Sitting for 30 minutes.

At 4.47 p.m., the Sitting was suspended.

On resuming at 5.44 p.m. with the Deputy Speaker in the Chair.

The Deputy Speaker: Thank you very much. Please be seated! Hon. Mrs Sandra Mayotte, please!

(5.44 p.m.)

Mrs S. Mayotte (Second Member for Savanne & Black River): M. le président, dans ce tourbillon d'attaques, de coups bas, de fabulations ignobles, de théories de complot et d'acharnement à caractère communal qui pollue l'atmosphère, permettez-moi de porter ma voix dans cet auguste Assemblée pour une toute autre cause. Un *Private Members' Motion* déterminant pour l'avenir de nos enfants, l'avenir de notre pays et le monde.

Il est temps de se recentrer, M. le président, de réfléchir à quels sont nos vraies motivations, ces motivations qui nous animent à un moment où le monde fait face à des crises sans précédent. Devons-nous nous battre entre nous ou conjuguer nos efforts pour une cause beaucoup plus grande où nos actions d'aujourd'hui seront déterminantes pour l'avenir ?

Permettez-moi, M. le président, de féliciter ma collègue l'honorable Joanne Tour pour avoir déposé ce *Private Members' Motion* sur l'usage et l'urgence de l'utilisation des véhicules électriques afin que nous comprenions nous aussi l'urgence d'accentuer nos efforts pour encourager encore plus l'utilisation des véhicules électriques sur notre territoire.

Comme l'honorable Ashley Ittoo, j'ai également parcouru quelques écrits et documentations sur le réseau routier se tenant et aboutissant afin de mieux comprendre le rôle que joueront les véhicules électriques et leur importance.

M. le président, il est important pour nous de soigner notre méconnaissance du rôle joué par la biodiversité dans le fonctionnement des écosystèmes terrestres et marins à la base de la vie telle que nous la connaissons aujourd'hui. Par exemple, le rôle fondamental joué par les micro-organismes du sol dans les cycles du carbone. Les sols constituent un acteur clé du cycle du carbone terrestre du fait de l'importance des stocks de carbone organique et des flux associés. Les sols se situent au cœur des bouleversements du cycle du carbone en cours de l'anthropocène.

C'est quoi l'Anthropocène ? Eh bien, on pourrait appeler cela comme une nouvelle époque géologique qui se caractérise par l'avènement des hommes comme principale force de changement sur terre, surpassant les forces géophysiques. C'est un peu l'âge des humains, celui d'un désordre planétaire inédit. Comprendre également le rôle de l'oxygène et de l'azote, la fonction essentielle d'autres microorganismes marins dans l'absorption du gaz carbonique, le rôle des plaines, des collines, des forêts, des montagnes dans l'épuration de l'eau ou encore l'immense travail de pollinisation des insectes.

L'histoire de la terre et celle de l'espèce humaine ont aujourd'hui convergé. Cette collision de deux histoires marque une rupture dans la relation qui unit les hommes à la terre. Se sont en effet ces habitants qui sont devenus les principaux moteurs des changements qui l'affectent. Les désordres générés par les effets de l'activité humaine ont des conséquences multiples sur le climat, sur la sécurité alimentaire, sur les accès aux ressources vitales, sur les

migrations forcées et soudaines, sur la précarité énergétique. Ils contraignent les relations internationales à inventer et mettre en œuvre de nouvelles politiques globales.

M. le président, si aujourd'hui des animaux emblématiques tels les tigres ou les éléphants disparaissent de la surface de la terre, c'est qu'il y a derrière des modifications drastiques de leur milieu habitable. Le sort de ces espèces n'est que la face visible de phénomènes plus profonds susceptibles d'affecter fortement les conditions de vie de l'homme sur la terre.

M. le président, l'effet de serre est déséquilibré par les activités humaines. En particulier, l'utilisation des énergies fossiles : pétrole, gaz, charbon. Celles-ci provoquent artificiellement l'augmentation des concentrations de gaz à effet de serre dans l'atmosphère et par conséquent accentuent le réchauffement de notre planète. Le CO₂ représente près de deux tiers des émissions mondiales de gaz à effet de serre induites par les activités humaines et a la particularité de rester présent très longtemps dans l'atmosphère. C'est pourquoi on mesure usuellement l'effet des autres effets de gaz à effet de serre en équivalent de CO₂. Les émissions de CO₂ actuels auront un impact sur les concentrations dans l'atmosphère et sur la température du globe pendant de très nombreuses années.

Le changement climatique est une réalité, M. le président, la perturbation des grands équilibres écologiques s'observent déjà. Un milieu physique qui se modifie et des êtres vivants qui s'efforcent de s'adapter ou de disparaître. On commence également à envisager les conséquences sur les sociétés humaines. Migration forcée, multiplication des conflits, utilisation des ressources en eau, appropriation des terres fertiles et justement je suis tombée sur un article des histoires mauriciennes qui fait voyager, sans jeu de mots, dans le temps. Les histoires mauriciennes racontent ceci, je cite –

« Le chemin de fer était devenu incontournable dans le paysage mauricien au début du 20e siècle. Il revient au goût du jour dans l'île Maurice du 21e siècle. Le Métro Express empruntera le même itinéraire que les vieux trains qui faisaient la liaison Curepipe-Port-Louis, via Rose Hill, pendant une bonne partie du 19e siècle et toute la première moitié du siècle dernier, avant d'émettre leur dernier sifflement en 1964, sous la poussée du transport par automobiles et autobus.

Au début du 20e siècle, le train était encore un moyen de transport incontournable, tant pour les passagers que pour les marchandises et plus spécialement la canne à sucre. A

partir de 1909, une Commission Royale fut chargée de se pencher sur les finances de la colonie. Après des cyclones successifs en 1901 et 1902, précédés d'une grande sécheresse en 1897 et suivis, en 1904, d'une épizootie de surra qui décima le cheptel (dont la majeure partie était des animaux de trait utilisés pour le transport), l'économie de l'île était dans le rouge. Les chemins de fer souffraient d'un manque d'entretien, notamment au niveau de certains points, comme celui de Grande Rivière Nord-Ouest, qui nécessitaient déjà à cette époque des travaux de réfection. Dans son évaluation de la situation du système ferroviaire, il n'était donc pas étonnant que la commission préconisât la remise à niveau des infrastructures mais recommanda surtout la plus grande rigueur dans la gestion de la compagnie de chemin de fer.

Mais cette sonnette d'alarme ne fut pas entendue puisque la situation financière de la *Mauritius Government Railways* allait se dégrader, justement à cause d'une mauvaise gestion. Le contrôle des tickets, par exemple, était quasiment inexistant sur certaines lignes et les passagers en abusaient. De plus, le nombre de voitures et de bus avait pris une pente ascendante, au point que le transport routier était devenu un sérieux concurrent du voyage par train. Les premiers taxis firent leur apparition en 1910 et les premiers trajets par autobus se firent en 1927.

Ainsi, dès 1931, l'administration britannique commença à se demander s'il ne fallait pas supprimer le transport des passagers sur toutes les lignes, sauf celle reliant Port-Louis à Curepipe. Et comme le train devait rester compétitif avec les autobus et les taxis pour survivre, le prix du ticket passager fut abaissé à un tiers du prix qui était en vigueur en 1914 ! Non content de s'essouffler sérieusement, le chemin de fer commençait à faire machine arrière.

À la fin de la Seconde Guerre mondiale, le transport de passagers par autobus enregistra des progrès spectaculaires. La construction des meilleures routes le rendait plus attrayant que le chemin de fer. En 1950, la perte massive d'argent, enregistrée par la compagnie des chemins de fer, poussa une autre commission d'experts britannique, la Commission Bunning, à recommander la suppression définitive du transport de passagers sur la ligne Port-Louis-Curepipe. Celle-ci n'intervint finalement qu'en 1956, lorsque les transports routiers furent prêts à prendre le relais. Par la suite, le train servit exclusivement au

transport du sucre, jusqu'à sa suppression définitive en février 1964, toujours pour des raisons de questions de coûts, notamment au niveau de sa masse salariale.

Mais, comme la roue finit toujours par tourner, les compagnies d'autobus allaient, vers la fin des années 70, connaître à leur tour des moments difficiles. Puis dans les années 1980, plusieurs d'entre elles se retrouvèrent en faillite à cause de coûts d'opération trop élevées. Il y eut de nouveaux changements dans le décor avec l'entrée en service des compagnies d'autobus individuelles, plus rentables.

Entre-temps, le nombre de véhicules n'avait pas cessé d'augmenter. En 1960, il n'y avait, dans toute l'île, que 14,000 véhicules mais ce chiffre passa à 25,000 en 1970, puis à un peu moins de 70,000 en 1980, avant de grimper à 123,000 véhicules en 1990 et à 244,000 en 2000.

À l'aube du 21^{ème} siècle, Maurice est devenue une ruche bourdonnante avec 2,428 km de routes (dont 99 km d'autoroute) et un parc de 486,000 véhicules (selon les chiffres disponibles en 2015). Voitures, camions, autobus se bousculent sur un réseau routier désormais saturé.

Aujourd'hui, ce ne sont plus les impératifs liés à la production sucrière qui dictent la conduite dans les transports, mais ce sont toujours les exigences économiques qui priment. Pour faire face aux problèmes liés à la congestion routière, les experts estiment que le moment est venu d'adopter un mode de transport alternatif.

L'introduction d'un métro léger devrait ainsi permettre à l'industrie des transports de trouver un nouveau souffle. Il y aurait 19 stations sur les 26 km du réseau de Métro Express, qui coïncide avec l'ancien tracé du chemin de fer. Elles seraient à Curepipe, à Floréal, à l'avenue Sadally, à Vacoas, à la rue Palmerstone, à Phoenix, à Trianon, à St Jean, à Quatre Bornes, à l'avenue Victoria, à Rose Hill, à l'avenue Révérend Lebrun, à Beau Bassin, à Richelieu, sur le Black River Road, au Centre Nelson Mandela, à la gare Victoria et à la place de l'Immigration.

Le *Prime Minister's Office* prévoit un chiffre d'affaires de R 220 millions la première année. Si 20% des passagers par autobus et 10% des automobilistes qui circulent dans le corridor Curepipe-Port-Louis (soit 53,800 personnes) utilisent le métro léger, celui-ci

aura gagné la bataille des transports publics. Autrement dit, 50 ans après avoir été mis au rancart, le chemin de fer pourrait ainsi prendre sa revanche sur les transports routiers. »

Extrait des Histoires de l'île Maurice.

Et, ailleurs dans le monde, dès 1830, le premier prototype de véhicule électrique fut connu, et conçu par Robert Anderson à partir d'une calèche. En 1834, l'Américain Thomas Davenport conçoit le tout premier modèle de véhicule électrique, qui est plutôt une locomotive. C'est en 1852, comme premier modèle de voiture électrique, est commercialisé. Mais, à cette époque, les voitures n'étaient pas munies de batteries rechargeables, puisque la recharge n'existait pas encore à cette époque.

En 1859, c'est l'année justement qui marque l'invention de la batterie rechargeable au plomb-acide par Gaston Planté. Elle sera ensuite améliorée par les travaux de Camille Faure en 1881.

M. le président, grâce à ces hommes, les voitures électriques prendront leur réel essor, car la voiture électrique deviendra viable alors qu'elle peut être rechargée. En 1881, un premier modèle viable de voitures électriques est mise au point par trois Français dont Camille Faure, électrochimiste qui travaille à l'amélioration des batteries au plomb, Charles Jeantaud, constructeur automobile et Nicolas Raffard, ingénieur en mécanique. La même année, le Français Gustave Trouvé présente une autre automobile électrique à l'Exposition internationale d'électricité de Paris. Une concurrence s'installe entre la voiture thermique, la voiture à vapeur et la voiture électrique.

1899 marque les progrès et le potentiel de la voiture électrique alors que la voiture de Camille Jenatzy nommée la « Jamais Contente » bat un record de vitesse en dépassant les 100 km/h. En 1900, les taxis électriques circulent dans les rues de New York. À cette époque, c'est 38% du marché américain de l'automobile qui est électrique. On décrit que les voitures électriques sont faciles à démarrer et qu'elles ne laissent pas un nuage irrespirable de fumée noire derrière elles. Déjà à cette époque, on qualifie que ces voitures sont bien supérieures aux voitures thermiques.

En 1908, Ford lance son modèle T, symbole de l'essence bon marché, de l'accessibilité et de la puissance du moteur thermique. C'est un point de rupture dans l'histoire de la voiture électrique puisque les progrès de l'électrique cèderont au profit des innovations de Ford. Dès 1920, c'est donc le début de l'ère de la voiture thermique accessible à tous alors que l'essence est bon marché. Malheureusement, la voiture électrique tombe dans l'oubli pour les 40 prochaines années.

En 1966, la pollution est de plus en plus présente et les impacts environnementaux commencent à se faire sentir. Ainsi, la réduction de la pollution de l'air entre dans les problématiques du Congrès américain qui recommande dès 1966 la construction des voitures écologiques. En plus, les fluctuations du prix du pétrole ramènent aussi l'intérêt envers les voitures électriques.

En 1973, avec le premier choc pétrolier et l'embargo de l'OPEP envers les États-Unis, la voiture électrique devient un sujet d'actualité. Partout à travers le monde, plusieurs initiatives sont lancées et des prototypes sont développés.

En 1990, la Californie vote pour le *Zero Emission Vehicle (ZEV)*. La loi prévoit que chaque constructeur devra compter 2% de véhicules verts dans ses ventes en 1998 pour être autorisé à commercialiser ses autres voitures.

Tous les grands constructeurs se mobilisent alors pour lancer des modèles de voiture écologiques. General Motors, qui avait lancé un programme ambitieux de développement de voiture électrique, lance l'EV1 et un peu plus de 1000 unités seront produites. Toutefois la plupart des projets ne verront pas le jour, mais au moins une réflexion s'amorce. En raison de la faible autonomie, c'est le début des modèles hybrides.

Depuis, M. le président, beaucoup d'eaux ont coulé sous les ponts. Aujourd'hui, notre pays a abordé le virage de la transition énergétique en mettant en œuvre plusieurs programmes d'inclusion du renouvelable dans son mix énergétique.

Le gouvernement mauricien a lancé deux nouveaux programmes d'énergie renouvelable pour réduire la dépendance du pays aux combustibles fossiles et diminuer ainsi les émissions de gaz à effet de serre de 40 % d'ici 2030.

Le transport est le moteur de l'activité économique fondamental pour le bien-être humain, mais le secteur est également une source majeure d'émissions de gaz à effet de serre et d'autres formes de pollution, avec des impacts importants sur l'environnement et la santé humaine.

L'activité de transport augmente dans le monde à mesure que les économies se développent, ce qui signifie que les émissions du secteur sont également en hausse. C'est en grande partie parce que 95 % de l'énergie des transports dans le monde provient encore de combustibles fossiles.

Le secteur des transports est le deuxième secteur émetteur de gaz à effet de serre à Maurice. Selon *Statistics Mauritius*, quelque 850 kilotonnes d'équivalent de dioxyde de carbone ont été émises au cours de l'année 2020, représentant ainsi 16% des émissions totales de gaz à effet de serre. La décarbonisation du secteur des transports terrestres serait mieux réalisée en réduisant sa dépendance au pétrole et en faisant la promotion des véhicules électriques.

Le secteur des transports comprend l'aviation, le transport routier et la navigation maritime et l'énergie consommée par le secteur transport représenteraient environ 48,6 % de la consommation totale d'énergie finale, ce qui a diminué de 28,3 %, passant de 552 kilotonnes d'équivalent de pétrole en 2019 à 396 ktep en 2020, bien que le nombre de véhicules à moteur immatriculés ait diminué.

De 2019 à 2020, la consommation de carburant pour les transports terrestres est passée de 388 ktep, (Kilotonnes d'équivalent de pétrole) à 328 ktep, moins de 15,5 %.

En 2020, les émissions de gaz à effet de serre (GES) des industries du transport ont été estimées à 851 gigagrammes d'équivalent de dioxyde de carbone contre 1,132 en 2019, en baisse de 24,8 %.

M. le président, Maurice est donc bien partie pour s'orienter vers des moyens de transport alternatifs plus écologiques, contribuant aux engagements pris par ce gouvernement dans le cadre de l'Accord de Paris.

Les véhicules électriques sont un moyen de parvenir à des transports plus écologiques car ils offrent une opportunité attrayante de réduction de CO₂, d'amélioration de la qualité de l'air

local, de réduction de la dépendance aux combustibles fossiles importés et créent de nouvelles opportunités économiques.

M. le président, la voiture électrique, telle que les principaux constructeurs automobiles la proposent aujourd'hui, présente plusieurs avantages par rapport à sa concurrente thermique –

- (a) la motorisation électrique s'accommode de toute source d'énergie primaire, dont les énergies renouvelables ;
- (b) elle n'émet pas de polluants locaux à l'utilisation, hors les poussières émises par les divers frottements, frottements de pneus, plaquettes de freins ;
- (c) elle n'émet pas de pollution sonore aux basses vitesses.

Et donc, cette situation offre donc une solution partielle à deux importantes incidences du système de mobilité actuel : les polluants locaux et dans une moindre mesure, des émissions de CO₂.

Aujourd'hui, M. le président, les véhicules électriques sont disponibles dans presque tous les segments de véhicules spécialisés, des cycles aux produits les plus complexes tels que les ambulances et les véhicules de lutte contre l'incendie.

L'anxiété d'autonomie n'est plus un problème car la plupart des véhicules peuvent fonctionner toute la journée avec leur batterie autonome. Les autobus, par exemple, peuvent aujourd'hui parcourir plus de 250 km par jour avec une seule charge de batterie.

Dans le contexte local, nous retenons ceci : dans son discours de la COP26, notre Premier ministre, Pravind Jugnauth, a confirmé que le gouvernement encouragera l'utilisation de voitures électriques et a pris l'engagement de réduire les émissions de gaz à effet de serre par 40 % d'ici 2030.

Compte tenu de la taille de l'île, Maurice cadre bien avec l'introduction des véhicules électriques à batterie. Le mix électrique actuel à Maurice se compose de 23,9% d'énergies renouvelables et se caractérise par un facteur d'émission relativement élevé de GES.

M. le président, l'émission de CO₂ par an en 2020 d'un véhicule conventionnel moyen était de 3,8 tonnes, et pour un véhicule électrique à batterie chargé sur le réseau, l'électricité est 5% plus élevée à 4 tonnes. Pour 2030, les émissions de CO₂ seraient donc réduites à 3,6 tonnes

pour un véhicule électrique à batterie en raison de la part plus élevée d'énergies renouvelables. Cette émission pourrait être réduite à zéro, purement et uniquement.

Tout comme l'ONU Environnement, l'objectif du gouvernement est de rompre le lien entre une mobilité accrue et une augmentation des émissions. Nous pensons que la mobilité à faible émission de carbone peut réduire la pollution tout en créant des emplois, en rendant les rues plus sûres, en renforçant les infrastructures et en stimulant les économies locales.

Aujourd'hui, le secteur des transports est presque entièrement dépendant des combustibles fossiles. Pour stimuler la transition vers la mobilité électrique, le gouvernement a approuvé l'adoption de la feuille de route décennale pour l'intégration des véhicules électriques à Maurice, ainsi que la mise en place du comité de mise en œuvre et de suivi des véhicules électriques sur 10 ans sous la présidence du ministère de l'Énergie et des utilités publics. Et il y'a 2 ans de cela, l'île Maurice accueillait ses 2 premiers autobus électriques.

La feuille de route met l'emphase sur les conditions du marché pour une intégration durable des voitures électriques à un rythme qui trouve le bon équilibre entre les coûts et les bénéfices.

Il aborde la situation actuelle de la production d'électricité principalement à base de combustibles fossiles et l'intégration des énergies renouvelables dans le temps.

Il considère également l'importance vitale d'un réseau électrique fiable et rentable sur l'île et l'impact possible des véhicules électriques sur le réseau électrique.

La portée de l'étude était aussi limitée aux véhicules électriques à batterie (BEV) et aux véhicules électriques hybrides rechargeables (PHEV). Il a été estimé que la réduction des émissions de dioxyde de carbone attendue pour la période 2019 à 2030 sera d'environ 14,244 tonnes sur la base de l'objectif d'énergie renouvelable (ER) de 40% d'ici 2030.

Les voitures 100% électriques enregistrées à Maurice cette année augmentent de façon exponentielle et devraient connaître une hausse continue avec le *PRB* qui encourage l'achat de véhicules 100% électriques.

M. le président, au cours des 20 dernières années, les véhicules électriques ont connu des développements technologiques importants qui ont non seulement réduit leurs coûts mais aussi réduit leur empreinte environnementale et augmenté leur utilité. Dans le même temps, les

transports publics et la mobilité partagée sont devenus des ingrédients clés pour un transport efficace.

L'introduction des véhicules électriques dans les flottes est souvent la première étape pour surmonter les défis et les obstacles à la mobilité électrique et est essentielle à son adoption plus large dans notre république.

Pour atteindre les objectifs de l'Accord de Paris sur le climat et réduire la pollution croissante de l'air, il est plus qu'essentiel que les pays à revenu faible et intermédiaire participent à une transition mondiale vers une mobilité électrique à zéro émission. Le PNUE (Programme des Nations Unies pour l'Environnement) qui est la plus haute autorité en matière environnementale dans le système des Nations Unies, en collaboration avec des organisations internationales de premier plan et en collaboration également avec des partenaires du secteur privé, de la finance et du monde universitaire, a développé un nouveau programme mondial pour soutenir le passage à la mobilité électrique dans les pays à revenu faible et intermédiaire du monde entier.

Le projet d'introduire plus de véhicules électriques veillera à une intégration transformatrice dans les modes de transport urbain existants via un cadre politique global. Il reproduira les leçons apprises dans d'autres pays dans les sous-régions, comme une première étape vers une transition générale vers la mobilité électrique.

D'ailleurs, dans cette optique, le budget 2021-2022 avait déjà prévu plusieurs mesures visant à encourager l'exploitation de véhicules électriques telles que des droits d'accise sur des véhicules utilisant jusqu'à 180 kilowatts pour le transport de marchandises permettant ainsi aux propriétaires de véhicules d'installer un système photovoltaïque n'excédant pas 10 kilowatt pour recharger leurs voitures.

La forte augmentation du nombre de véhicules hybrides et électriques que ce soit neuves ou seconde-mains entre 2015 et 2017 a été due aux incitations fiscales fournies par ce gouvernement en juillet 2016, lorsque les taux des droits d'accise sur les voitures hybrides ont été abaissés de 30 points de pourcentage pour tout cylindrée. Les accises ont également été supprimées sur les voitures électriques jusqu'à 180 kilowatt.

Le droit d'immatriculation et le permis de conduire payables sur une voiture hybride ou électrique sont inférieurs de 50 % à ceux payables sur une voiture à moteur conventionnel.

Il y a eu également la subvention en espèces sur les bus électriques. À l'achat d'un bus électrique pour la fourniture de transports en commun, une subvention de R 1,2 million a été accordée pour les bus de 9 mètres et une subvention de R 1,5 million accordée pour les bus de plus de 9 mètres.

Ce gouvernement travaille également sur l'installation des bornes de recharge de véhicules électriques. Un particulier par exemple, est autorisé à déduire de son revenu imposable l'investissement total sur l'acquisition d'un chargeur rapide pour une voiture électrique. M. le président, s'agissant d'une entreprise, il est permis aujourd'hui de déduire de ses revenus le double du montant investi dans un chargeur rapide.

Il est donc encourageant de constater, M. le président, que même le service bancaire propose aujourd'hui une solution de prêt bancaire 100% éco-responsable qui a pour but d'encourager les usagers de la route à se tourner vers des voitures hybrides et électriques.

Et dans le budget 2022-2023, le gouvernement démontre sa détermination à réduire notre indépendance aux importations des produits pétroliers et à accélérer la transition vers les véhicules électriques. Avec des facilités de prêts à un taux préférentiel de 3,5% par an aux entreprises qui voudraient rendre leur flotte de véhicules exclusivement électriques, le gouvernement démontre encore une fois sa détermination à réduire notre indépendance aux importations des produits pétroliers.

M. le président, la transition écologique doit désormais donner le cap de nos politiques de développement au niveau national et international. La lutte contre les dérèglements climatiques et la préservation de nos ressources naturelles selon des modes coopératifs et solidaires sont les conditions indispensables du vivre ensemble au 21^{ème} siècle.

M. le président, l'écologie est sur toutes les lèvres, que ce soit sur celles de nos politiciens comme dans celles des entreprises. L'écologie s'immisce partout et il est temps que chacun de nous lui accorde la meilleure des places car il en va de la préservation de notre écosystème et de notre santé, mais surtout de l'avenir de nos enfants!

La conduite d'une voiture ne déroge pas à la règle. Même si nous conviendrions qu'il est plus écologique d'emprunter les transports en commun ou tout simplement de marcher, ces moyens de transport ne conviennent malheureusement pas à toutes les situations et l'usage de la voiture s'avère indispensable.

La lutte contre le changement climatique nécessite de sortir de l'addiction des transports aux ressources fossiles. Ce secteur n'a pas pleinement entamé sa transition énergétique et dépend encore largement du pétrole et de ses dérivés, dont il est le plus gros consommateur. Le recours aux énergies d'origine renouvelable s'impose donc comme une nécessité dans la transition vers une mobilité durable. Elle implique également une transformation des moyens utilisés pour se déplacer, des véhicules particuliers comme des transports collectifs, et des usages et des pratiques de chacun. Dans ce contexte, le véhicule électrique est une des solutions pour assurer la transition bas-carbone.

M. le président, les véhicules électriques ont définitivement un impact direct sur la population en réduisant la pollution de l'air, en améliorant la sécurité énergétique nationale et en créant des emplois verts.

Lorsque l'on souhaite acheter une voiture électrique, l'une des premières raisons pouvant poussé à en choisir une est sans doute son impact écologique. Sur le plan environnemental, la voiture électrique gagne haut la main par rapport à la voiture thermique. La voiture électrique émet entre 2 et 3 fois moins de CO₂ qu'une voiture thermique si l'on prend en compte l'ensemble de son cycle.

M. le président, aujourd'hui, il est question de réduction d'émissions de gaz à effet de serre et les voitures électriques vont permettre de réduire les émissions de gaz à effet de serre de manière significative par rapport aux véhicules traditionnels, bien qu'elles ne soient pas complètement zéro émission.

Sur le marché mondial et selon l'Agence Internationale de l'Énergie (IEA), le nombre de véhicules électriques en circulation devrait atteindre au moins 145 millions d'unités d'ici la fin de cette décennie. De quoi économiser des millions de litres de pétrole.

Selon le *Global Electric Vehicle Outlook* publié annuellement, 3 millions de nouvelles voitures électriques et hybrides rechargeables ont été immatriculées en 2020, soit une

augmentation de 41 % par rapport à l'année précédente. Un chiffre d'autant plus encourageant quand on connaît l'effet de la pandémie de la Covid-19 sur le marché mondial de l'automobile. Au cumul, le parc mondial de voitures branchées atteint désormais 10 millions d'unités. S'y ajoutent environ 1 million d'utilitaires, de camions lourds et de bus électriques.

Indépendamment des objectifs climatiques fixés par les Accords de Paris, la trajectoire empruntée semble positive. On pourrait ainsi éviter le rejet de 120 millions de tonnes de CO₂ grâce à cette évolution.

Il faudrait aussi, M. le président, réfléchir sur le long terme. Pour le long terme, c'est à dire après 2026, en raison des nombreuses évolutions rapides dans ce secteur, il faudrait attendre encore un peu pour un meilleur calcul de l'impact du véhicule électrique et pour décider des mesures politiques à privilégier. Un bon suivi de l'impact des mesures politiques est crucial, car la technologie et les prix évolueront rapidement. Mais également pour se réadapter là où c'est nécessaire grâce à une politique d'adaptation.

Par conséquent, M. le président, il est important de surveiller, d'évaluer et de revoir la stratégie et les mesures sur une base régulière. De même, il est important d'identifier clairement l'entité responsable de la collecte des données, du suivi et de l'évaluation. Cette entité doit développer un plan qui comprendra des activités pour renforcer le suivi des mesures, et des activités pour communiquer/partager les résultats des exercices de suivi et d'évaluation pour informer le gouvernement de tous les impacts de véhicules électriques sur le réseau routier, sur l'économie, et surtout sur l'environnement .

M. le président, c'est un fait, la voiture électrique pourrait probablement devenir la voiture principale du foyer en termes de kilomètres parcourus et l'impact sur les importations d'hydrocarbures et donc sur les exportations de capitaux qui serait énorme, surtout si l'électricité consommée dans ces véhicules électriques soit produite naturellement.

En œuvrant pour plus de véhicules électriques sur nos routes, ce gouvernement démontre sa volonté de mieux protéger l'environnement et le climat et trouver les ressources nécessaires au développement de l'efficacité énergétique, des énergies renouvelables, tout en limitant sur le long terme, l'augmentation inexorable du prix des énergies fossiles qui pèse sur le pouvoir d'achat des citoyens, comme l'a annoncé le Premier ministre, l'honorable Pravind Kumar

Jugnauth, lors du Sommet mondial des dirigeants en novembre 2021. Je cite ici si vous me le permettez sa déclaration –

« Pour les petits pays insulaires comme Maurice, le réchauffement climatique et l'élévation du niveau de la mer représentent un défi existentiel qui causera d'énormes dégâts et entraînera un déplacement massif de personnes, en particulier des îles basses.

Nous nous engageons donc à prendre des mesures qui contribueront à –

1. réduire les émissions de gaz de 40% d'ici 2030 ;
2. à atteindre 60% d'énergie verte dans notre mix énergétique d'ici 2030 ;
3. à éliminer progressivement le charbon dans la production d'électricité avant 2030 ;
4. à promouvoir une économie circulaire impliquant 70% des déchets provenant des décharges d'ici 2030 ;
5. à encourager l'utilisation des véhicules électriques ;
6. à promouvoir une agriculture intelligente et des programmes de plantation d'arbres à l'échelle de l'île ».

M. le président, les voitures ne sont pas près de disparaître. Nous devons donc trouver des moyens d'alléger l'impact environnemental de tous ces kilomètres parcourus en voiture. Les véhicules électriques, plus économiques et écologiques que les voitures traditionnelles équipées de moteur à combustion, constituent la solution idéale à ce dilemme pour le monde dans lequel nous vivons. En rassemblant toutes les parties prenantes, nous pouvons changer nos modes de vie centrés sur des véhicules énergivores et vivre une mobilité propre, plus calme et plus économique dans laquelle le véhicule électrique jouera un rôle clé.

M. le président, il est un fait que ces facteurs peuvent maintenant être entravés par les conflits entre la Russie et l'Ukraine ; personne ne sait quand tout cela cessera. Il est difficile d'imaginer exactement ce qui se passera dans les mois ou les années à venir, à la fois parce qu'il y a tant de facteurs à prendre en compte et parce que l'invasion de l'Ukraine par la Russie est toujours en cours et que beaucoup de choses pourraient changer.

Mais essayons de faire quelques hypothèses, en commençant par les prix élevés du carburant. Les prix du pétrole qui ont connu des flambées ces derniers temps, sans pour autant

stimuler les ventes de voitures électriques. Mais pour aujourd'hui, l'électrification est au cœur des plans de presque tous les constructeurs et la sensibilisation du public à la durabilité environnementale a considérablement augmenté.

De plus, s'il est vrai que le coût initial d'une voiture électrique tend à être plus élevé que celui d'une voiture thermique, il est également vrai que l'écart s'est déjà réduit et continuera à se réduire. À contre-courant, certains peuvent décider d'anticiper le passage à la mobilité durable en misant sur les économies à long terme.

M. le président, je conclurai avec cette déclaration de notre Premier ministre et je cite –

« Le déploiement d'un plus grand nombre de véhicules électriques alimentés par des sources d'énergie propres et renouvelables est l'une des stratégies les plus efficaces pour réduire les émissions de carbone dans le secteur des transports. L'exploitation des véhicules électriques nous aidera à atteindre une réduction de 40% des émissions globales de carbone d'ici la fin de cette décennie, ce qui permettra à Maurice non seulement d'honorer ses engagements en matière de réduction des émissions de carbone, mais aussi d'améliorer la balance des paiements en termes de réduction des importations de produits pétroliers.

Les véhicules polluants ne nuisent pas seulement à l'environnement, mais ils constituent également une menace pour la santé de notre population, dans la mesure où le secteur des transports contribue à environ 28% des émissions globales. Le secteur des transports terrestres est le deuxième plus grand émetteur de gaz à effet de serre et les secteurs de l'énergie et des transports génèrent environ 80% des émissions globales de carbone à Maurice. Il est urgent d'inverser cette tendance et cela ne peut se faire qu'avec les efforts collectifs et la contribution de tout un chacun ».

Et nous ne pouvons qu'imaginer comme nous l'a si bien dit l'honorable Joanne Tour, que d'ici 2030, nous soyons en mesure de réduire significativement l'utilisation des véhicules conventionnels à forte émission de carbone, nous serions alors, l'exemple à suivre dans la région en termes de mesures prises pour encourager l'utilisation des véhicules électriques et plusieurs mesures qui ont été déjà annoncées par ce gouvernement.

Alors aujourd'hui je voudrais encore une fois féliciter l'honorable Joanne Tour pour cette motion apportée dans cette auguste Assemblée et je vous dis merci, M. le président, pour votre attention.

The Deputy Speaker: Thank you very much. Hon. Collendaveloo, please!

(6.34 p.m.)

Mr I. Collendavello (Third Member for Stanley & Rose Hill): Thank you Mr Deputy Speaker, Sir.

I shall be brief but let me start by first of all congratulating the mover of the motion for having given us an opportunity to deal with an important subject which is going to probably affect the whole landscape of our country for a long time. Let me also congratulate the interveners who have taken the floor today for their very learned discourse and very enlightening and informative speeches.

I have no intention of dampening the enthusiasm of everyone over electric cars, but I think that we have got to be realistic on the matter. Yes, electric vehicles; not only electric cars, but buses and lorries are bound to be a normal feature of Mauritius in the years to come. For the moment, however, there are a few points which beckon us.

First of all, it is the cost of these electric vehicles which we know is about three times the cost of an internal combustion driven vehicle. There is therefore an investment in capital which takes the toll on most of us, except those environmentalists who have money to spare on such vehicles, which means that in a small island like ours – contrary to what I have heard – only when you drive very long distances such as MPs of No. 14 or salesmen, you will be able to at least break even on your capital investment. That is the first point because it makes no financial sense to have an electric car and to drive only from Quatre Bornes to Port Louis three times a week and to go to the supermarket on Sundays. That makes no financial sense, and it will not contribute a lot to the environment.

Secondly, the operational cost. Yes, you do not have to go to the petrol station every now and then. And you save on petrol, apparently you save 30%. Because you need to charge your electric car, let us say overnight, - *en passant*, the electricity which you use is electricity which is produced by fossil fuels in Mauritius at least; coal or heavy diesel oil. This is not very

environmental friendly. Unless you put specific chargers which are driven by solar energy, which is quite possible and which indeed is done; I know somebody who has this sort of apparatus to charge his motor car. So, unless you do that, you are using up almost the same amount of fossil fuel.

I am sure that we read the very interesting article of Dr. Raj Daliah in *l'Express* of a few days ago; very informative on the charges of electric vehicles. Apparently there are three types of charges. I quote him - I take no responsibility for the scientific background of that article - "we have the ordinary charger, which takes one whole night to charge your vehicle and which is apparently quite enough for a country like Mauritius, there are medium grade chargers and there are also fast chargers." I have read it in the paper that one importer is now doing fast chargers so that you can stop by - and it takes about half an hour - to charge your battery. Apparently, I have been told, these fast chargers can in the long run damage your battery. And, hold on, the battery is extremely expensive, about Rs400,000! If it breaks down in the middle of the road, your car just stops and you just have to tow it away until you can obtain a battery at very high cost, as I have said. Therefore, you need charge your electric car. You cannot just think that it is going to live forever and ever.

Then, there is another thing. I have seen an electric car myself, I do not drive one. There is no engine when you open the bonnet. It is rather surprising to see that there is absolutely nothing in this, except the cord which you use to charge your vehicle. There is no engine and there are no moving parts which mean that in about 15 to 20 years' time, the car's mechanic, as we know him today will disappear. We will not have the *ti garage* or the *grand garage* because there is nothing to repair except the tyres, the suspension, the shock absorbers, or that sort of things.

So, there is also this aspect which we need to think of. All this to say that we should not just rush with great enthusiasm with the electric vehicle without having addressed. This is why I said that I am going to vote in favour of this motion and I support the motion as well as the interventions made by the interveners who have spoken in favour of that motion.

I hope that we will see the day when the prices will have driven down, where we can get over this. We are not only going to continue the efforts made by Government, as stated in the motion, but we should better the efforts, as hon. Ittoo has said; find imaginative solutions to

encourage the introduction of these vehicles in the same way that we can think of liquefied natural gas for lorries, for taxis and for buses as it is done in India where you have buses driving absolutely silently because they are driven by LNG. So, we have imaginative solutions which can be used for improving the landscape of Mauritius and bringing our contribution to the fight against climate change although we probably contribute 0.0001% to the overall environmental catastrophe which is afflicting our universe.

As I have said, we hope for the best. We hope that this motion is going to impress on the population; the population will follow these debates and take cognisance. We also need the contribution of the importers who will have to learn not to use the same profit margin on their cars to assist in the development of electric cars.

This is all I had to say, Mr Deputy Speaker, Sir. Thank you very much for your attention.

The Deputy Speaker: Thank you very much. Hon. Mrs Luchmun Roy, please!

(6.45 p.m.)

Mrs S. Luchmun Roy (Second Member for Port Louis North & Montagne Longue): Thank you, Mr Deputy Speaker, Sir, allow me to, first of all, congratulate my hon. colleague, hon. Ms Joanne Tour, for proposing such a bold and important motion to the House.

Mr Deputy Speaker, Sir, such a theme, a thought-provoking one, requires our full attention as well as our commitment, as here we are talking about the legacy that we are leaving for our children, an effort today for a brighter tomorrow.

I should also thank and set on record the absolutely realistic approach of the former speaker, hon. Ivan Collendavelloo, for giving a different perspective and a different approach to this theme. As a young Member, and I am sure that all the young Members in the House really appreciate his intervention today because it has been really thought-provoking, it brings me to something, that I need to change my script as well. *Je dois revoir ma copie*, as we say.

Also, to set on record, Mr Deputy Speaker, Sir, today, it is Thursday and we are here talking about a very important motion but can you hear the silence in this august Assembly? This is how it is when Members of the Opposition are not there, crying and yelling. So, this is how it sounds when you drive an electric vehicle as well.

(Interruptions)

Mr Deputy Speaker, Sir, in 2010 to 2019...

(Interruptions)

An hon. Member: *Osman to dakor?*

Mrs Luchmun Roy: Even they agreed.

An hon. Member: *Touzour la mem!*

Mrs Luchmun Roy: No, we set on record the presence of three Members from the Opposition. We really appreciate it and it shows your involvement and how important you feel this topic is.

An hon. Member: Always; always!

Mrs Luchmun Roy: Always present.

(Interruptions)

And I think, Members on this side should really thank them for being here today.

Mr Deputy Speaker, Sir, in 2010-2019, the average annual global greenhouse gas emissions were at the highest levels in human history but the rate of growth has slowed. Without immediate and deep emissions reductions across all sectors, limiting global warming to 1.5° C is beyond reach. However, there is increasing evidence of climate action, said scientists in the latest Intergovernmental Panel on Climate Change. Limiting global warming will require major transitions in the energy sector. This will involve a substantial reduction in fossil fuel use, widespread electrification, improved energy efficiency and use of alternative fuels such as hydrogen. Cities and other urban areas also offer significant opportunities for emissions reductions. These can be achieved through lower energy consumption such as by creating compact walkable cities, and there are some other regions where they are using bicycles; electrification of transport in combination with lower emission energy sources, and enhanced carbon uptake; and storage using nature. There are options for established rapidly growing new cities as well.

Mr Deputy Speaker, Sir, reducing emissions in industry will involve using materials more efficiently, reusing and recycling products and minimising waste for basic materials, including steel, building materials and chemicals. Low to zero greenhouse gas production processes are at

their pilot to near commercial stage. This sector accounts for about a quarter of global emissions. Achieving net zero will be challenging and will require new production processes, low and zero emission electricity, hydrogen, and where necessary, carbon capture and storage.

Agriculture, forestry and other land use can provide large-scale emissions reductions and also remove and store carbon dioxide at scale. However, land cannot compensate for delayed emissions reductions in other sectors. Response options can benefit biodiversity, help us adapt to climate change and secure livelihoods, food and water and wood supplies. Limiting warming to around 1.5°C requires global greenhouse gas emission to peak before 2025 at the latest and be reduced by 43% by 2030. At the same time, methane would also need to be reduced by about a third.

Even if we do this, Mr Deputy Speaker, Sir, it is almost inevitable that we will temporarily exceed this temperature threshold but could return to below it by the end of the century. The global temperature will stabilise when carbon dioxide emissions reach net zero. For 1.5°C, this means achieving net zero carbon dioxide emissions globally in the early 2050s. For 2°C, it is in an early 2070s. Quite futuristic! This assessment shows that limiting warming to around 2°C still requires global greenhouse gas emissions to peak before 2025 at the latest and be reduced by a quarter by 2030. Since 2010, there have been sustained decrease of up to 85% in the cost of solar and wind energy and batteries. An increasing range of policies and laws have enhanced energy efficiency, reduced rates of deforestation and accelerated the deployment of renewable energy.

Sea levels are rising and oceans are becoming warmer. Longer, more intense droughts threaten crops, wildlife and freshwater supplies. From polar bears in the Arctic to marine turtles off the coast of Africa, our planet's diversity of life is at risk from the change in climate. Climate change poses a fundamental threat to the places, species and people's livelihoods. To adequately address this crisis, we must urgently reduce carbon pollution and prepare for the consequence of global warming which we are already experiencing.

Short-lived climate pollutants, including black carbon, methane, hydrofluorocarbons and tropospheric ozone are powerful climate forces with global warming potentials many times that of carbon dioxide. These pollutants also significantly impact air quality, food, water and

economic security for much of the world, both directly through their negative effects on public health, agriculture and ecosystem, and indirectly through their impact on the climate.

The measures and technologies to reduce short-lived climate pollutants are available today and are quite practical, technically feasible and cost effective. Putting them in place can bring immediate climate benefits. This can help us to achieve many global Sustainable Development Goals (SDGs) and improve the health and livelihoods of millions.

Mr Deputy Speaker, Sir, it is not enough to act, but we need to act now. Our delayed efforts to mitigate either carbon dioxide or short-lived climate pollutants emissions will have negative and potentially irreversible consequences for global warming, rising sea levels, food security and public health due to their relatively short lifetime in the atmosphere, ranging from a few days to a few decades. Reducing short-lived climate pollutants can rapidly slow the rate of global temperature rise, complement efforts to mitigate carbon dioxide emissions and keep global warming below 2°C.

The Climate and Clean Air Coalition's measures can cut methane emissions by at least 40% and black carbon up to 70% by 2030, and virtually eliminate 99.5 high global warming potential, hydrofluorocarbons altogether by 2050, all compared to 2010 levels.

Mr Deputy Speaker, Sir, reducing short-lived climate pollutants, provides other significant benefits, these include preventing millions of premature deaths annually, improving our food security by avoiding 10 of millions of tons of annual staple crop loss protecting vital ecosystem and ecosystems services reducing the risk of dangerous and irreversible climate tipping points and making significant contributions to achieving the 2030 agenda for sustainable development.

Widespread action to reduce short-lived climate pollutants can prevent 0.6 degrees celsius of warming by 2050. Cutting emissions of carbon dioxide and short-lived climate pollutants is critical to slow the rate of global warming.

A warmer climate increases public health challenges as well, Mr Deputy Speaker, Sir, like heat aggravated illnesses, increases in vector-borne diseases and decrease access to safe water and food, cutting short-lived climate pollutants can slow the rate of warming and lower public health risk as well.

Short-lived climate pollutants like tropospheric ozone o₃ and black carbon, a component of fine particle matter or pm 2.5 are also dangerous air pollutants, reducing them will prevent millions of premature deaths each year from air pollution. The biggest benefits will be felt locally with the greatest health benefits expected in Africa.

Mr Deputy Speaker, Sir, no scenario for containing global warming is possible without urgent and distinct action in the transport sector. This is a sector that is often overlooked in the climate equation but it should not be currently responsible for 20% of global Greenhouse Gas, GHG as we called it, emissions and rapidly increasing transport in something that impacts everyone and everywhere.

Transport, like climate change, is not going away. These two areas of global concern are inextricably linked. Accelerated and equitable climate actions in mitigating and adapting to climate change impact are critical to sustainable development. Some response options can absorb and store carbon and at the same time help communities limit the impacts associated with climate change, for examples, in cities, networks of parks and open spaces, wet lands and urban agriculture can reduce flood risks and reduce heat island effects.

Mr Deputy Speaker, Sir, mitigation in industry can reduce environmental impacts and increase employment and business opportunities as well as rightly mentioned by my colleague, hon. Ashley Ittoo. Electrification with renewables and shifts in public transport can enhance health, employment and equity. Somewhat, quietly, electric vehicles are gaining traction across the world.

Mr Deputy Speaker, Sir, the world is about to pass another important milestone in electric vehicle adoption. 20 million plug-in vehicles on the road globally, come June, according to Bloomberg, as mentioned previously by the former orators....

The Deputy Speaker: May I interrupt you? We are about to end. I know you probably have a lot more to speak, but if you can bring it to a reasonable place where you can stop because I have about 15 seconds. So, bring it at a reasonable place from where you can pick up again.

Mrs Luchmun Roy: Okay. That is remarkable growth for what we can see through EV. So, I can only thank you all for your kind attention and I will continue in the next session. Thank you.

The Deputy Speaker: Just at the moment.

ADJOURNMENT

The Vice-Prime Minister, Minister of Education, Tertiary Education, Science and Technology (Mrs L. D. Dookun-Luchoomun): Mr Deputy Speaker, Sir, I beg to move that this Assembly do now adjourn to Friday 29 July at 3.00 p.m.

The Vice-Prime Minister, Minister of Local Government and Disaster Risk Management (Dr. A. Husnoo) seconded.

Question put and agreed to.

The Deputy Speaker: The House stands adjourned! I see everybody wants to go home, no adjournment matters.

At 7.00 p.m., the Assembly was, on its rising, adjourned to Friday 29 July 2022 at 3.00 p.m.