

# Business, Energy and Industrial Strategy Committee

## Oral evidence: Clean Growth Strategy and International Climate Change Targets, HC 871

Tuesday 9 July 2019

Ordered by the House of Commons to be published on 9 July 2019.

[Watch the meeting](#)

Members present: Rachel Reeves (Chair); Vernon Coaker; Drew Hendry; Stephen Kerr; Peter Kyle; Sir Patrick McLoughlin; Albert Owen; Mark Pawsey; Antoinette Sandbach.

Questions 352-403

Witnesses

[I](#): Sir David Attenborough.

## Examination of witnesses

Witnesses: Sir David Attenborough.

**Q352 Chair:** Thank you very much, Sir David, for coming to give evidence to our Select Committee this morning on net zero. We started this inquiry before the Government amended the Climate Change Act to enshrine in legislation a commitment to net zero by 2050, and we started the inquiry because we believe in the imperative to take carbon out of our economy and our atmosphere.

Sir David, you have devoted much of your life to showing us the beauty of our planet, but also the changes that are being made to it. We want this morning to explore some of that, as well as public attitudes towards global warming, climate change and the actions that not just Government but all of us need to take to live our lives in a different way in order to help us to conserve the planet and all those things that are dear to us. So could I start, Sir David, by asking this question? In your experience of working around the world over a number of decades, what is the most striking impact of climate change that you have experienced at first hand?

**Sir David Attenborough:** I think the most vivid was probably a few years ago now, sadly, and was on the barrier reef. I first went to the barrier reef in the 1950s. I was a young underwater swimmer, diver, and I remember—it is the most vivid memory almost of my natural history life—the extraordinary experience of diving on the reef and suddenly seeing this multitude of fantastically beautiful forms of animals that you had never seen before. There were fishes of all kinds—organisms of all kinds. You didn't really know what they were even though you were supposed to be a zoologist. There are more individuals and more variety of life on a coral reef than anywhere else in the world, even more than the tropical rainforest. I am not a very good underwater swimmer, but I have been there a number of times, and I will never forget diving on a reef about 10 years ago now and suddenly seeing that instead of this multitude of wonderful forms of life, it was stark white. It had bleached white because of the rising temperatures and the increasing acidity of the sea.

You may say, "Well, that beauty and all that complexity just interests you as a naturalist." That is true, but in fact, it is crucial to the world, because about 30% to 40% of all oceanic fish—fish throughout the seas—depend upon the coral reefs at some time in their lives. They either spawn there, or there are fish there that grow up—it is a nursery, the reef—and if you wipe that out, you wipe out whole areas of the ocean. The notion that somehow, we have stopped this—the oceans on which we depend for our food, and so many nations around the world do—is appalling.

That was the first time that I really thought—because the notion of "Oh, well, a particular rhinoceros may disappear" is sad to people who care



## HOUSE OF COMMONS

about natural history and rhinoceroses, but it did not strike me that the whole population of the world is going to be affected, as it now is. The other time I saw evidence was in South Georgia in the Antarctic, just outside the Antarctic circle. It is the richest form of Antarctic life, with hundreds of thousands of penguins and seals and so on. The first time I went there was about 30 years ago, and I stood at the bottom of a glacier. Some 10 years ago, I went back and stood in the same place, and the glacier was not even visible. It had just retracted.

Sceptics will say, "I can take you to another place where the glaciers grew" or something, or "I can take you to a place where the coral reefs are flourishing", so it is very difficult to pick one point, one site, where you can actually say, "That is a proof." It isn't; it is just an example. The proof is in the graphs. The proof is in the scientific records. The proof is when you analyse bubbles in the sea ice and glacier ice to show you what has happened to the climate over the years. That is what the proof is, but the illustrations are those two. Sorry for such a long answer.

Q353 **Chair:** Do you think, Sir David, that the trend is worsening? Is it speeding up?

**Sir David Attenborough:** Yes, because the whole process is speeding up; after all, 50 years ago, it had not even really started. Of course, the atmosphere was there and it had its various constituents, but 50 years ago—60 years ago, even—when I was making natural history programmes, nobody thought that the climate was changing. If there was any concern about the welfare of the natural world, it was that individual species were disappearing, but nobody thought that human beings would change the climate, and we now know we are. What is worse, of course, is that we are changing the climate in a way that is irreversible—not in our lifetimes, but certainly in our grandchildren's lifetimes—if we go on the way we are.

Q354 **Peter Kyle:** Thank you for coming before the Committee this morning. I was given a copy of *Life on Earth* on my ninth birthday by my parents, and back then, you opened the world to kids like me—a door into the natural world. You described the world, you showed the world, and you explained things that were happening that were inconceivable to a kid back then. You didn't talk about the impact and its relationship with humans very much, with the exception of your visit to the gorilla community, but now you are playing a very assertive role in the relationship between man and the natural world. Looking back on your career, do you wish you had done that earlier?

**Sir David Attenborough:** We didn't know. We really didn't know. It seemed inconceivable 50 years ago—I mean, it wasn't inconceivable that we could exterminate a species. I knew that gorillas could have been exterminated had we not taken action, but I did not believe that we human beings could change the climate—or worse, that the changes we were going to impose on the climate would be irreversible, which is what they will be if we go on the way we are.



## HOUSE OF COMMONS

Q355 **Peter Kyle:** But your role has turned into more of a campaigning role, hasn't it? You have used the position that you have to try to change behaviour, whereas you did not do that back in the '70s.

**Sir David Attenborough:** Because I am not by nature a propagandist. I started making natural history programmes because I thought there was nothing I preferred to see more on the television set than the beauties of the natural world. I would love to be just going on doing that—it is what I enjoy. I enjoy looking at birds of paradise on display. I enjoy coral reefs. I enjoy these things, and I enjoy bringing them to people who do not have the good luck that I have had. That's fine. But if you become aware of what is happening, after a while you do not have any alternative. Fifty years ago, we were not doing all that. Fifty years ago, there were quite a lot of people who would have said, "No, no, no—it's rubbish. Of course we aren't affecting the environment." There were a lot of people saying that. I worked for the BBC and have done all my life. Fifty years ago, there was a duopoly: there was BBC and commercial television. The BBC was a public service. If you are a public service, you have to represent a public point of view, and you cannot use it for propaganda.

Q356 **Peter Kyle:** So you waited for the public mood to change before you started becoming quite assertive about the impact that humans were having on the natural world.

**Sir David Attenborough:** Not quite as easy as that. I did not wait for public opinion to change; I waited until the facts seemed incontrovertible. Fifty years ago, the people who were saying, "Protect the natural world" were not talking about changes in the climate, because that was not a possibility—it had not occurred to us. We were talking about saving gorillas, giraffes, rhinoceroses, elephants and so on, which was a perfectly valid attitude to take. You should not be campaigning. The BBC is not a campaigning organisation; it has a responsibility to present problems to the public in a way that the public cannot avoid.

Q357 **Peter Kyle:** Your series are typically between eight and 13 episodes, looking back at your career. Have you come across issues out there that you unfortunately could not give a full episode to and have therefore not covered, with regards to the impact that humankind is having on the natural world?

**Sir David Attenborough:** Yes. The style of television has changed—that is for the BBC to decide, and it has to react to changes in styles and so on. The 13-part series *Life on Earth*, which you kindly mentioned, was one of the first. It took a serious subject and looked at it over 13 one-hour episodes. There are very few programmes like that; the BBC does not do that anymore, but it does individual programmes. For example, at the beginning of the millennium I did a programme on population, which quite straightforwardly took a problem that was not high on the public list and informed viewers about it. It was called *How Many People Can Live on Planet Earth?*

Q358 **Peter Kyle:** You cover plastics. Are there other issues like plastics that you do not think have gone mainstream in the UK, and that you are



## HOUSE OF COMMONS

chomping at the bit to get out there?

**Sir David Attenborough:** The plastic issue is a very interesting one. I had been going on about plastics for 20 years. Anybody who swims or travels can see the horrors of what plastic pollution can do. I had been putting it in programmes for years and nobody took much notice of it. In *Blue Planet II*, there was a sequence that lasted about two minutes maximum, yet for some reason—if I knew what the reason was, I would be a richer man, I dare say—it rang a bell in the public consciousness. I have never seen anything like it. For 90 seconds or two minutes to have the effect that it had was absolutely extraordinary.

Q359 **Peter Kyle:** I suppose every human being has a relationship with plastic, so it is relatable. Finally, you have previously said that you do not want to be alarmist and that sometimes talking about extinction is a turn-off for viewers. How do you editorially get right the balance between education and entertainment?

**Sir David Attenborough:** In a serious way, I do not see any difference between education and entertainment. If you are educational and boring, you are wasting your time, anyway. If you are entertaining, but about trivial things, you are missing a great opportunity. The best programmes in my book are those that do both those things simultaneously. *Life on Earth* was there in order that people should understand and delight in the fantastic story of how life developed on this planet in 13 hours. That was what it was about.

I was not electioneering, but at the end I had to say something about the future, and I said what I said. By and large, I only wish I did not have to make programmes that were propagandising or arguing or that were polemical. I just wish people could look at a programme of the natural world for what it is.

The amazing thing is, of course, that we now know that that is not just, to use your word, entertainment. We actually know that people depend upon the natural world for their very sanity and that, in moments of crisis in their lives, the natural world is the one place and the one climate in which they can get solace. The natural world is profoundly important to us all. It is not just because you are interested in counting birds or something, or indeed counting wildflowers. It is much more profound than that. From a practical point of view, we are dependent upon the natural world for every breath of air we take and every mouthful of food that we eat. But it is even more than that. We also depend upon it for our sanity and our sense of proportion.

Q360 **Albert Owen:** Sir David, you mentioned that in the '50s nobody really knew about or talked about the link between humans and climate change. An epoch moment for me was in the 1980s with CFCs and the link with the ozone layer depleting. The BBC then almost had unanimity with scientists coming on and saying that this was a problem and it could be repaired if we disposed of those gases in a different way. James Lovelock has led on this, as you know. Do you think the BBC should have gone further? That was the moment when that link was established, so



## HOUSE OF COMMONS

should they have done more?

**Sir David Attenborough:** I didn't think there was any need for it to go further, in point of fact. Those that understand and those with their hands on power were convinced simply on the scientific evidence. It was not put to the vote in the way that other issues might be. Scientists, informed people and informed politicians could see that it had to be done. Not only that, but they also saw the solution, which was to deal with CFCs. "Would you like us to eliminate CFCs or not?" was never put to the electorate, because nobody had ever heard of CFCs.

Q361 **Albert Owen:** Politicians did act.

**Sir David Attenborough:** Politicians did it, and the civil service and the Government did it because they could see it was correct and had to be done. That was one of the great examples of the nations of the world collaborating. In a democratic sense, that is an overstatement slightly, but in an informed power sense it is not an overstatement. Scientists and responsible Governments around the world saw what the problem was, saw that it was incontrovertible and decided to do it. It was not put to a vote. It was not an electioneering proposition in the way that the problem we now face has to be in a democratic society.

Q362 **Sir Patrick McLoughlin:** Sir David, thank you for coming along this morning. I add my thanks to everybody else's. As a presenter, what do you think the challenges are for anybody working on communicating climate change to the public and politicians? Is there a problem of almost expecting the United Kingdom to be able to sort this problem when actually it is a much, much bigger problem?

**Sir David Attenborough:** I don't think anyone supposes that the problem is just the UK's. I think that British scientists have been absolutely foremost in the research and in making clear that research. This country and America, in particular, have been very active in studies of the upper atmosphere. It is there that the evidence lay. So, yes, British scientists have been foremost and that is a matter of pride, I suppose.

Certainly, the CFC thing was a discovery of British scientists working for the British Antarctic Survey, an organisation of which this country should be very proud. We have a history of polar exploration second to none. That was a direct result of scientific research done at the south pole.

Q363 **Sir Patrick McLoughlin:** If one considers what progress has been made in this country, as far as recognising the problem and the general acceptance now across the political sphere that we have got problems that we have got to deal with as quickly as possible, and the Government have accepted the 2050 target, there are other organisations that are urging us to go a lot faster to 2025. Do you think that 2025 target would be realistic or do you think the 2050 figure is much more realistic?

**Sir David Attenborough:** I don't know. In a way, I would think that is not the way to focus the problem. We cannot be radical enough in dealing with the issues that press us at the moment. The question is what is practically possible. How can we take the electorate with us in dealing with



## HOUSE OF COMMONS

these things? Because it costs money in realistic terms and dealing with these problems means we have got to change our lifestyle. Dealing with the problem is going to cost money internationally.

The question on how fast we can go is how fast can we carry the electorate with us? The most encouraging thing that I see, of course, is that the electors of tomorrow are already making their voices very clear. That is a source of great comfort, in a way, but also of justification and reality that young people now are recognising that their world is the future.

I am okay for the next decade and all of us here are okay because we won't face the problems that are coming. The problems in another 20 or 30 years are really major problems that are going to cause great social unrest and changes in the way that we live, in what we eat and so on. That is going to happen.

**Q364 Sir Patrick McLoughlin:** I think it is fair to say that 15 years ago there were probably a lot of people who were described as climate change deniers. I think that number has significantly reduced over the past 15 years, but there are still some people who would deny climate change. They would say, "This is the natural order; the world is always changing; environments always change. We are over-panicking." What would your response be to them?

**Sir David Attenborough:** I think that the voice of criticism and the voice of disbelief should not be stamped on in that sort of way. It is very important that the voices of dissent should have a place where they are heard and a place where the arguments between the two sides can be worked out in public, declared and analysed in public. That is very important.

I am sorry that there are such people in power internationally, notably in the United States but also in Australia. That is extraordinary because Australia is already facing having to deal with some of the most extreme manifestations of climate change. Both in Australia and America those voices are clearly heard and one hopes that the electorate will respond to those.

**Chair:** It is interesting, Sir David, that you say we cannot go fast enough on this; the only issue is what speed the public will accept, given the costs and the changes to people's lifestyles. One thing we are looking to do as a Select Committee, working with other Select Committees in Parliament, is to set up a series of citizens assemblies, to present some of the facts to people but also get them through a process of deliberation, to focus on what needs to be done both at national level and in the way that we live our lives. Do you have any experience of that sort of thing? Do you think it could a way of making that change at individual level that is needed?

**Sir David Attenborough:** I don't know how you do it, except that if you only did it in one area it would be very suspect. You would think, "Who is it who's trying to deal with that?" Look at past issues, such as tobacco: if



## HOUSE OF COMMONS

the only people saying that tobacco was not evil were suppressed, that would be catastrophic.

Q365 **Chair:** So it needs to have a cross-section of people and people from all around the country to have a proper conversation?

**Sir David Attenborough:** Yes, I think the message is it needs to be from all ages and from all points of view—everybody has to be convinced about this. There will always be a tiny minority—I hope it is a tiny minority—who say, “We don’t believe it,” and who keep us focused on being clear ourselves as to what the problem is.

Q366 **Vernon Coaker:** Good morning, Sir David. In this whole issue that you have been addressing, as well as other things about public involvement and perception, you made a very interesting comment about how we take the electorate with us. Has the public engagement with you changed over the past few years in terms of what they contact you about, or has it stayed the same?

**Sir David Attenborough:** It has been transformed, and I do not quite know why that is. I suppose, reflecting on it, there was a time in the 19th century when it was perfectly acceptable for civilised human beings to think that it was morally acceptable to own another human being as a slave, and somehow or other, in the space of about 20 or 30 years, the public perception of that totally transformed, so that by the middle of the 19th century, it was becoming intolerable that anybody could suppose that. There was a huge change in the public perception and the public perception of moralities.

I suspect that we are right now at the beginning of a big change. Young people in particular are the stimulus that is bringing that about. Members of the public are understanding that to chuck plastic into the ocean is an insult, and that to have the nerve to say, “This is our rubbish. We will give you money if you can spread it on your land in the far east instead of ours,” is intolerable. For some reason or other, young people see that very clearly now, and that is a source of great hope to me.

Q367 **Vernon Coaker:** Given that, do you think those young people have enough opportunity to influence decision makers and be involved with the decisions that are taken? You spoke very movingly at COP 24 recently about decision makers waking up to that, in a sense. Do you see enough opportunity for people to be involved?

**Sir David Attenborough:** I certainly do. The mere fact that you have invited me here means that you are well aware of what the circumstances are and how important it is that you who make our laws should be aware of these things. The electorate who vote for you should also be aware and require you to take advantage of these sorts of things.

Q368 **Vernon Coaker:** Do you think that we are slow in reacting to that public perception or public change? Is it quickening up or speeding up or, to be polite, do politicians need to get a move on?



## HOUSE OF COMMONS

**Sir David Attenborough:** Yes, of course it is slow in a sense. Ideally, those of us who are convinced about it would like you to say, "Tomorrow we will do something really extreme," but that is not the way the world works. In practical terms, the practical effect that this country has—practical, as against theoretical or intellectual—is small. The whole of the world has to deal with this if we are going to deal with it at all. We hold a proud position, in that we have been the forerunners who have been drawing attention to this worldwide and many other parts of the world are following. Some of them still have not followed, as we know, but by and large the movement is growing and accelerating, as far as I can see.

Q369 **Vernon Coaker:** The protest movements have contributed to that change in public perception and the pressure—in a good way—on politicians in a democratic society. I am trying to think of a way of putting this: do you see this change in mood across the whole of the population, across all income groups? The argument that "We can't do this because..." that is the point you made about taking the electorate with us. If it is a choice between climate and jobs and climate and prosperity, young people seem to be pushing the idea that maybe we are going to have to put a pause on always expecting an increase in our standard of living. Do you get any sense of that difference between income groups, for want of a better way of putting it?

**Sir David Attenborough:** I think young people have an easier way of visualising idealism and idealistic views, and not being fully aware of some of the more practical consequences that those of us who have lived rather longer know, in that it is quite easy to formulate and state idealism, but it does come at a cost. Young people are sufficiently convinced of it to hold to their beliefs and they will hold us to account.

Q370 **Antoinette Sandbach:** Sir David, the UN state of nature report indicated that 1 million species are, in effect, under threat from human activity. Do you think that is linked to climate change or is it also linked to other factors such as population growth?

**Sir David Attenborough:** Yes, both those things are having a great effect on the natural world. Certainly, population growth is, and the reasons that there are problems in Africa are that population growth is particularly high there. If you travel over the great plains where all these wonderful people live, you realise, when you are getting there, that you are driving through a lot of human habitation—there are a lot of people. And around the margins of the great national parks, there are people who want land. Many of the people live directly on and from the land. That is their salvation. They see "Why should those animals eat when we are starving?" So yes, there is a huge problem between population growth and conservation.

Q371 **Antoinette Sandbach:** So you agree with the scenario that there is an ecological emergency. You also spoke about how our connection with nature has a profound impact on man. What do you think are the most significant ways the changes in the natural world are now affecting the human world?



## HOUSE OF COMMONS

**Sir David Attenborough:** They are affecting us from every point of view. They are affecting us, and increasingly so, in where we are getting our food from. We depend on the natural world for food. We even thought, until recently, that the oceans there were infinitely large and that we could always get enough food to feed us, at least from the sea. That is not so.

If you look back at history, in the 18th and 19th centuries herring existed in the North Sea in immense quantities; you could not believe that human beings would have any effect on that. We have effectively exterminated them. The cod, which was also up in the North Sea—that has gone. So we started fishing around Newfoundland, the great fishing grounds in the North American waters. They are now gone. We are now catching fish to grind up to feed to farmed fish. It cannot go on. We are going to have to look for new sources of food—we really are—unless we do something about population. Someone said—it's an old joke—if you believe that you can have infinite growth in a finite situation, you are either an economist or a mad man.

Q372 **Antoinette Sandbach:** Given that the Government have now introduced net zero target, or legislated for it in the UK, how do you think that net zero target could benefit habitats that you have visited and the species that live in them?

**Sir David Attenborough:** Which target is that?

**Antoinette Sandbach:** The net zero carbon target.

**Sir David Attenborough:** Well, it gives us a measurement, a calibration, a target, to see where we are going and what we are aiming at, which is measurable. That is the advantage of it. The problem we are dealing with is so pervasive, you cannot just say, "We are winning here, or losing there." You have to make a summation of it in some way. Zero growth in world temperatures provides us with that measurement.

In a way, it is not as dramatic a target as one might wish, because non-scientific people might say: "1.5° C since the beginning of the industrial revolution—ridiculous! We can not do it". We can't of course, because that is an average and it deals with the highs and the lows.

Q373 **Antoinette Sandbach:** You spoke about soil depletion and the threat to insect life that will affect our food production. In terms of preserving the habitats that you have seen and some of the environments that are perhaps not in the UK, what would you say to constituents about how they would benefit economically and socially from preservation of habitats that may be a long way outside their local park or nearby Forestry Commission site?

**Sir David Attenborough:** If they are a long way away, they are beyond our jurisdiction anyway. You may say: "Well, we can help through subsidies. We can help to encourage things internationally," and I think we should. I would be surprised if people were quite as critical as you suggest they might be.



## HOUSE OF COMMONS

In a way, it is rather strange that people should care about gorillas, but they do. In the series you mentioned, Mr Kyle, when I showed mountain gorillas and subsequently said, "But their numbers are being reduced," the public really responded—with big money. One of the encouraging things to say in a rather discouraging world is that in fact there are now twice as many mountain gorillas in that area than there were when I first made that film.

When you say that, people's eyes light up. They are pleased. They are not so parochial as to say, "I don't give a damn about elephants." They clearly do, and thank goodness they do. That is at least something that you can put to the credit of the human race.

**Q374 Drew Hendry:** Hello, Sir David. Do you think the UK is still showing world leadership when it comes to tackling climate change?

**Sir David Attenborough:** I think our record has been pretty good. It has historical roots, and so it should have, because who started the problem? This country. It was the industrial revolution that started here. And what was the industrial revolution? The industrial revolution was based on burning coal in the late 18th and early 19th centuries. We started the problems. If we are now taking a lead in solving the problems, it is only right and responsible so to do.

**Q375 Drew Hendry:** In Scotland, the Scottish Government have set a world-leading target of 2045 to be carbon-neutral. Do you think that is important, and how does UK action and ambition affect target and policy settings in other countries?

**Sir David Attenborough:** In theory, it is. In theory, the countries of the world, in COP 21 in Paris, made the agreement that they would. Somebody has withdrawn of course, as we know, or threatened to withdraw—as I understand it, the United States is still bound by the agreement it made there and has not yet been able to do the legal processes to contradict it and to release it from those obligations. Of course, the President wants to do that and has said that he will do so, and it will be a very, very sad day if he succeeds.

There has been international recognition of the unity of the globe, which did not exist until relatively recently in our history. Our history is, by and large, a history about fighting with other nations; it is not about agreements, but the United Nations and previously the League of Nations have been attempts to bring us round to solve things by ways other than fighting, and now the United Nations is one of the foremost places where all these things are being debated, particularly with the COP process.

I remember walking out with the then chief scientist of this country, Sir David Francis, and his saying, "We've done it." This country and the people and the scientists of this country have been absolutely foremost in bringing that to international attention.

**Q376 Drew Hendry:** Do you think the UK Government's 2050 net zero target represents the UK doing its fair share of limiting global warming to 1.5°



## HOUSE OF COMMONS

C?

**Sir David Attenborough:** Yes, I do. My only hope is that we don't backslide and that no other country backslides either. However, it is a tough target. It is not an easy statement to have made and it will cost money; that is the nub of it. It is not just piety; anybody can express pious views. It is a practical commitment and I hope to goodness that we can achieve it and stick by it.

Q377 **Drew Hendry:** From what you are saying, the UK setting a target of 2050 for net zero is a good thing to do, and Scotland setting a target for 2045 is also a good thing to do. What do you say to those who argue that the UK cannot stop climate change on its own, because of bigger emitters like China, so why try? Why should we do these things?

**Sir David Attenborough:** That is a very dismal and pessimistic view of life—

**Drew Hendry:** I agree.

**Sir David Attenborough:** —to go through and say, "Oh well, we're not going to bother", when you have made the arguments, explained the argument that it is absolutely essential that it should be done. It is essential if we are going to avoid massive social unrest, apart from anything else, and massive destruction of all sorts of systems. And we say, "Oh, well, yes, it's going to happen, so we'll wash our hands of it."

The nations of the world in COP 21 mapped out in detail a practical way of dealing with this and thank goodness that all contributors agreed to do it. It is going to be difficult, but to say that it is difficult and therefore we won't try is simply not acceptable.

Q378 **Mark Pawsey:** Sir David, I want to follow up on the point that Vernon Coaker made, which is the impact on our prosperity of the changes that you are arguing we should make. We are the business Committee as well as being the energy Committee, so we are very interested in the competitiveness and the ability of British industry and British manufacturers to create the jobs and the prosperity that this country needs. Do you think that we have contradictory objectives here if we want to increase prosperity at the same time as dealing with the issue affecting our climate?

**Sir David Attenborough:** There are also huge opportunities for development. There are huge opportunities to get things right, and to benefit as a consequence. I have been speaking recently in Gstaad, for example, with the international financial bodies. It is clear to them that this is an opportunity to get things right. This is an opportunity to make big profits. This is an opportunity to innovate new systems. If we are ahead of the game, we will benefit as a consequence.



## HOUSE OF COMMONS

Q379 **Mark Pawsey:** But do people understand the lifestyle changes that they need to make? For example, air traffic: aerospace is a big and important industry in the UK. We are expanding our airports. Do you think people are willing and ready to reduce the number of flights they make, for example, in order to achieve the changes we are arguing for?

**Sir David Attenborough:** I can't believe they will just happily say, "I don't care, I am just going ahead". There is a way in which those in power as it is influence how many people take flights, and that is economically. You adjust the price to the various restrictions that you have.

Q380 **Mark Pawsey:** So you would argue that air travel should become more expensive, Sir David?

**Sir David Attenborough:** One way of reducing these things is to count the costs of air travel in real terms, in terms of the environment. If you cost that, then you would see that the tickets are extraordinarily cheap.

Q381 **Mark Pawsey:** Should we reduce people's expectation of being able to make a couple of flights every year to Spain or France, or on holiday? Should we restrict that in some way?

**Sir David Attenborough:** I don't see how you would restrict that other than economically.

Q382 **Mark Pawsey:** And is that not going to affect those who are less able to pay?

**Sir David Attenborough:** Yes.

Q383 **Mark Pawsey:** Is there not an equality issue here? Are you happy with that?

**Sir David Attenborough:** Yes, I'm afraid that is the case.

Q384 **Mark Pawsey:** Are people guilty of tokenism? We are talking about people who make an effort to use less plastic. Is that really going to have a significant impact on changing our climate? Will people just say, "I'll take one less overseas holiday than I might have done." Do people really understand the changes they will have to make in their lifestyle?

**Sir David Attenborough:** I don't know the answer to that. I don't know how else you would transfer it into practical life. You put the economic factor into it, and of course it would be nice to think that we were also putting the theoretical argument I outlined, which is that we should not all be travelling. I certainly worry that the job I do involves travelling. I have travelled by air only too frequently in the last six months in order to make programmes. Some of them are programmes about the very subject we are discussing, which I dare say is a paradox. The long-term solution is that you work out a way of powering aeroplanes electrically. That is already practical. If you can actually translate that and air transport becomes non-polluting, then that is the way out and we are back in tolerable circumstances.

Q385 **Mark Pawsey:** If people do have to change their lifestyles and it involves



## HOUSE OF COMMONS

them being slightly less well-off, and perhaps enjoying their lives slightly less because they are not able to travel as much, do you think there is a backlash? You spoke convincingly about the change in attitude in young people. As politicians we are rewarded for economic growth and for helping people be better off. You are arguing that we should be looking to restrict that in some way.

**Sir David Attenborough:** I am arguing that unless we do restrict it to some degree, we are going to have a much bigger and more serious collapse.

Q386 **Stephen Kerr:** I want to follow up on what Mark Pawsey said. One of my concerns is that there is such a low level of engagement at practical level in terms of what lifestyle changes will be asked of people. When there is a dawning realisation of what these changes might mean in terms of lifestyle, there may be a negative reaction. Does that concern you, and what message would you give to the Government in terms of engaging with people at the practical level of what lifestyle changes are necessary?

**Sir David Attenborough:** Certainly. The problem you are opening now is a very serious one. If world climate change goes on as it is, we are going to be facing huge problems with immigration. Large parts of Africa will become even less inhabitable than they are now. There are going to be major upsets in the balance between national boundaries. What President Trump is doing about Mexico and, indeed, what the rest of Europe is doing about people coming from Africa now—those kinds of problems are going to grow inexorably, and we are going to have to decide what to do about it. I don't pretend I know the answer to that. That is for the future, but it is going to happen.

Q387 **Stephen Kerr:** But you think that the Government should engage with people more widely to illustrate what lifestyle changes will be necessary on our part, in relation to those changes?

**Sir David Attenborough:** I think that an awareness of what the problems are is inevitably part of the arguments there are about restricting temperature rise.

Q388 **Stephen Kerr:** The more micro-level these lifestyle changes are, as things stand, the more the public will embrace them.

**Sir David Attenborough:** Let us hope. One can only hope that the answer to problems is understanding, and not ignorance.

Q389 **Albert Owen:** Sir David, you said recently at Davos, "We can create a world with clean air and water, unlimited energy, and fish stocks that will sustain us well into the future. But to do that, we need a plan". What is that plan? What would you like to see governments, collectively across the globe, do immediately to address the problem?

**Sir David Attenborough:** I don't suppose I could possibly outline a plan in that sort of way. What I suppose I was talking about was that we should expose what these problems are; we could expose what we think solutions



## HOUSE OF COMMONS

of them are; and think about the consequences. I don't see that we can do better than that.

**Q390 Albert Owen:** What kind of life do you think our grandchildren are going to lead? You mentioned earlier that this is not a problem for us in this room, but for future generations. Can humanity address the impact of climate change in time so that they have a decent life?

**Sir David Attenborough:** I suppose you have to define what you mean by a decent life—and that must be bound up with what your ambitions are as a human being. That is a question of individual moralities, as to how you accept inequalities between human beings.

**Q391 Albert Owen:** But you also mentioned that some of the larger countries in the world are not pulling their weight at this moment in time. You referred to the United States and its legal obligations of COP agreements and so on. China is quite optimistic about the future. A couple of years ago, the institute said that temperatures would not be reduced by 1.5 °C. It is now saying that it can be done. What do the countries of the world need to be doing now so that future generations can look to us and say, "They are making a good job of it for our future"?

**Sir David Attenborough:** I am not sure I understand the question.

**Q392 Albert Owen:** You said that there should be a plan, but you are not sure what the plan should be. The first question to you was, what had you seen in your long life of reporting that was stark—where you saw that there was climate change? What do you think we should do now, that can reverse that? What should be done? I think it is fair to ask you the question, so that you can help us in our deliberations as we move forward.

**Sir David Attenborough:** I think we should be encouraging industry to invest in new techniques to deal with generation of power. One of the paradoxes is that power is streaming down upon the earth from the sun, with no restriction on it at all. We can draw it directly with no problems, and to properly take advantage of that, we have to make sure that we have ways in which we can store power—batteries in which we can store power—on a major scale, and ways in which we can transport power without a major loss of the product, as it were. If we can solve those problems, we can change the polluting problems of both airlines and motorcars.

Now, we are on the way to that. The scientific knowledge that is known, as to how to deal with the batteries and so on, is also already there. If we can only co-ordinate the practical methods in which we can bring about storage and transport of energy, we have a huge solution to a majority, or a great number, of our problems.

**Q393 Albert Owen:** Do you think we are making good progress?

**Sir David Attenborough:** I think we probably are. There are all sorts of suggestions that come through my post, and maybe yours too, from people who think that they know a solution and which way they could do



## HOUSE OF COMMONS

each one of those problems. I have met quite a lot of people who are absolutely certain that they know how they could store energy, for example. I am not a physicist, I am not an industrialist and I am not an economist, so I do not know what stands in their way and I do not know where the hitches are, but there are people who understand that, and I just hope they are getting on with it.

Q394 **Albert Owen:** Finally, we talked in an earlier exchange about CFCs in the 1980s, and there was a solution to that. Do you think the world now understands climate change, and we can find a solution? I want to finish my questioning on a line of optimism.

**Sir David Attenborough:** I do not know about the world. Generalisations of that scale are beyond me, I am afraid. I do not even really understand our society; how do I know what people from all corners of this British society are thinking? I do not know, and I suspect none of us does. All we can do is talk about what we think are the sensible solutions to the problems that we also ought to recognise.

Q395 **Albert Owen:** But young people—there are many sitting behind you here—have given us hope as well. Some of these protestors, school strikes, and so on have given us hope.

**Sir David Attenborough:** Absolutely, yes. The idealism of youth is something that should be treasured and respected. Let us hope they maintain it into their adult life.

Q396 **Stephen Kerr:** Building on what Albert was saying, I think what we are really trying to ascertain from you is whether you are optimistic that we are going to be able to crack this problem of climate change.

**Sir David Attenborough:** Do you know, I have no idea as to what the future holds? I see no future in being pessimistic, because that leads you to say, "To hell with it. Why should I care?" I believe that way, disaster lies. I feel an obligation, because the only way you can get up in the morning is to believe that actually, we can do something about it, and I suppose I think we can. Whether that is optimistic or not, I do not know, and whether in fact it is going to produce a result or not, I do not know, but that is the only way I can operate. I have to get up in the morning and say, "Something has to be done, and I will do my best to bring that about."

Q397 **Vernon Coaker:** Just to finish on this optimism, Sir David, Peter Kyle and I were just talking about the fact that you have drawn to our Committee the youngest audience that we have ever had. The serious point is that, as somebody who has worked for decades in this area, the optimism must be that you have inspired a young generation. I mean, they are packed in behind you, and that was the point of the questions that I and others have asked. We have to be optimistic, but challenge ourselves, it seems, to do better. You look at all these young people here—I am sure they have come for us as well—[Laughter.]



## HOUSE OF COMMONS

**Sir David Attenborough:** It is their world that we are playing with. It is their futures that are in our hands. If the faces around here do not inspire us to do that, I don't know what will.

**Chair:** Building on that, I think Albert and Vernon make an important point about the audience today. It is wonderful to see so many young people coming in because they care so passionately about this. I was saying to you, Sir David, before this session started that when I go into schools in my constituency and ask young people what one thing they would want to do if they could be Prime Minister for the day, the answer comes back time and again on issues around the environment and climate change—whether it is stopping polluting the oceans with plastic or reducing the number of cars in the local area because of the terrible effects of air pollution.

I wonder whether I could use the audience for a moment and ask who here thinks that climate change is enough of a priority and who thinks that the Government should go further. Who thinks that it is enough of a priority today? *[Interruption.]* And who thinks that the Government should go further, and push further and faster on this? *[Interruption.]* I think the vast majority are saying that it should go further, and I think that that is a lesson for all the politicians around this table. I hope that we will reflect that in the report that we will produce, and that the Government will listen as well.

I would say to everybody watching today to keep up the pressure on us, because as politicians we respond to the public. That is our job. If you tell us, and tell us loudly and over and over again, that this is your priority, it will be a priority for more politicians. Thank you, Sir David, for everything that you have done to inspire young people, and all of us today. For us this has, I think, been the most inspiring session, certainly since I have become Chair of the Committee, and it has been a privilege to chair it. Thank you for everything that you do, and thank you everybody for coming to observe today. *[Applause.]* And that has never happened before either!