

## New Climate Leadership for a Low Carbon, Climate Resilient Future

*Edward Cameron, Climate justice advocate*

Good morning everybody. As mentioned, I left Dun Laoghaire 22 years ago to take the climate message around the world. I always want to begin by thanking my friends and colleagues in the EPA for giving me the opportunity to come home.

I don't know if you noticed this as you walked into the room in the very, very beginning, but Dire Straits was playing, which shows that the EPA has a sense of timing and sense of humour. What I'm going to do at the very beginning of this conversation is to reinforce the diagnosis that we are facing a moment of dire straits. As has already been mentioned, we're facing a limited time horizon through which we can begin to properly address climate risk.

I want to take the conversation beyond the coming apocalypse, which is typically where the climate conversation begins and ends on. I really want us to focus on emerging leadership that we've already begun to create over the course of the last number of years, particularly with the Paris Agreement, the action of governments around the world, the grassroots activism that we see, but also, in my view, a very positive development within the private sector that is now leading to finance innovation, technology and climate commitments, right across industrial sectors. Finally, what I want to do is to try and land the presentation with some areas of strategic advice or guidance that I hope can inform the rest of the conversations that will happen during the course of the entire day.

One of the things I would say by way of housekeeping is: please do not strain your eyes by trying to see the words on the power point. I will talk you through the slides. My email is going to be available on the very last slide, and I'm very happy, in fact, delighted to meet with anybody bilaterally who's interested in any of the content and discuss it in greater detail.

So let's start with a whistle stop tour of the science.

Everybody knows, I'm sure, in this room that our understanding of climate change is driven in great part by the wonderful assessment reports of the Intergovernmental Panel on Climate Change. The most recent global assessment was the fifth, in around about 2014. But last year we had the 1.5 degree report that gave us a sense as to why 1.5 degrees Celsius was the more appropriate target rather than the 2 degrees Celsius identified in the Paris agreement. There are 1,000's and 1,000's and 1,000's of peer reviewed published science that collectively make up the IPCC report.

I want to make sure you leave this room with 4 words from those 1,000's of pages.

The first is a confirmation that climate change is unequivocal. It is not, to quote President Donald Trump, a Chinese hoax, it is real. We see it in the evidence, in the science, but we also see it in observed impacts that we experience now on a weekly basis right around the world.

It is urgent. It is urgent because the time horizon we have available to us to avoid unmanageable climate change and manage unavoidable climate change, that time horizon is limited. In addition to that, the more we produce greenhouse gas pollution, the more we damage the global atmosphere, the more the process begins to accelerate.

Third is that it is human. It is not caused by solar flares, orbital variations, tectonic activity or volcanoes. It is caused by human activity related to land use, energy, mobility and other factors.

Importantly, it is also human in terms of its impact. The time has passed when we think of climate change as glaciers and polar bears. The real tragedy of climate change is that it undermines the realisation of human rights. It effects the livelihoods we can have, our attempts to alleviate poverty. It undermines human health. It undermines the right to food. It undermines the very right to life itself. It disproportionately affect the marginalised and the vulnerable in our societies. It undermines our shared prosperity.

The final word that's often overlooked, which is equally important, is that all of this is solvable. We do not have to commit ourselves to a suicide mission for a doomed planet. We can activate ourselves and use the financial, political, technological and other innovations already available to us today, to not only manage climate risk, but to use this as an inflexion point to build a better world.

Now, over the course of the last eighteen months, we've seen a whole series of climate impacts reverberate right around the globe and this particular map of the Globe illustrates that this is something that is happening on an Earth basis.

It isn't limited to one particular geography, but there's a couple of particular illustrations that I want to draw to your attention in the Western Hemisphere.

The first is on the West Coast of the United States, where we saw unprecedented wildfires during the course of the last two plus years. 15 of the largest 20 wildfires in the history of the state of California have burned since the year 2000. But interestingly, the most recent wildfire caused the collapse of Pacific Energy, one of the largest utility companies in the United States. Illustrating that climate change is no longer simply a reputational problem for business, it's no longer simply a financial or operational problem for business. It has now become a compliance and legal problem for business because the bankruptcy of PG&E is directly related to those wildfires.

In addition, if you look a little bit further to the East, you'll notice that the most expensive hurricane season on record was 2017 Atlantic hurricane season. It cost nearly 300 billion dollars of damage is right across the Eastern Seaboard. Think of the health care and education and infrastructure that could have been purchased with those avoided losses but also, interestingly, two tragic points.

The first is that Hurricane Michael and Hurricane Florence, both of those hurricanes, represented a departure from the normal. They weren't fast moving, fast spinning hurricanes causing wind damage. They were slow moving hurricanes that settled over land for a long period of time, that absorbed a lot of moisture and that dumped a lot of moisture on the land that they affected.

That's very important because in the United States, although most people have wind damage insurance only 14% of Americans have flood damage insurance. So we're not just facing an increase in intensity and frequency of extreme weather events, we're facing new weather events that human systems are not currently well placed to respond to.

In addition to that, also tragically, we saw 3000 people lose their lives on the island of Puerto Rico. Premature deaths that would not have happened without Hurricane Maria passing over that island state. What's really interesting is although we should never compare and contrast different human tragedies - it was immediately noticeable to me that the number 3000 is the same as the number of people who lost their lives on 9/11. If you think of the societal and global response to 9/11 and compare it to the images of President Trump distributing paper towels on the island of Puerto Rico, that is the clearest indication that we have not yet mobilised as a global community to the challenge that we currently face.

What I want to talk about is the fact that as we go about managing this risk, we have already created for ourselves the foundations of our future success. We need to accelerate the work that we have begun. We need to deepen it. We need to raise the levels of ambition but we have begun the journey and it's very important that we recognise that as we now seek to capitalise on it.

I want to start with the Paris Agreement and I want to acknowledge that many people in this room, particularly those involved in the Irish negotiating team, made great strides within the European Union delegation to help us design and finally agree The Paris Agreement.

Again, as with science, there's a number of words I want you to leave the room with at the end, and the first word is 'Unprecedented'.

We will often hear stories in the press about how The Paris Agreement is not enough, and it is not enough. We will often hear stories in the press about how The Paris Agreement is fragile and it is fragile. But it is important to bear in mind that when it comes to participation, 196 six countries around the world have signed The Paris Agreement. Only one of them has indicated a desire to leave.

189 of those countries have national climate action plans and together they have put in place the broadest and deepest commitment to reducing Green House gas emissions in history.

That is something to celebrate. But in addition to that, those commitments are defining because if you go through the cumulative impacts of these national climate action plans, you'll see that over the next ten years alone there is a commitment to mobilise over thirteen trillion dollars in new energy investments in the clean energy sector, and if you add into that, the investments in mobility and infrastructure and the built environment and land use you're talking, in fact, about tens of trillions of dollars and a global economic stimulus.

The question is not only 'How do we use The Paris Agreement to further reduce emissions going forward?', the question is 'Who is going to have the intelligence, and imagination and creativity and political enabling environment to seize the opportunities that we are creating in this next decade with this new climate economy?'

In addition, it's immediate. The Chinese government went straight home from Paris and they implemented their national climate action plan into the 13th five year plan. Within that plan, they have committed to sourcing 20% of all of their energy needs by 2020 from renewable energy sources. That is the equivalent of all the electricity generation in the United States today, over the next 10 years.

They've also committed finance that is the equivalent of a modern Marshall Plan, the Marshall Plan, being the instrument that recreated Europe after the Second World War, and as a consequence of their investment, as a consequence of their ambition they're now home to the largest renewable energy companies in the world and they are creating millions of jobs in clean energy. They're becoming, in fact, the clean energy superpower of the twenty-first century.

We, however, do see that The Paris Agreement is elastic, meaning it has the potential to go further, faster. Baked into The Paris Agreement and its architecture is a commitment to quote 'progressively increase ambition over-time'. Which means what we agreed in 2015 is really only designed to be a foundation upon which to build.

And as we go through the five year cycles baked into the Paris agreement, all governments commit to coming back in each successive negotiation and raising their level of ambition. So it is a first step rather than a last step.

But it is also something that has the potential for backsliding because we know, for example, that the United States has an intention to withdraw and there is a danger that that will give cover to other countries who wish to withdraw as well.

And finally, we know that The Paris Agreement is incomplete. Before The Paris Agreement, we were on course for over 4 degrees Celsius of temperature rises by the end of this century. And to put that into context, the basic crops upon which we depend for food security: maize, wheat, corn and rice will not grow in a four degree Celsius world. As a consequence of The Paris Agreement we're now on course for 2.8-3.2 degrees Celsius of temperature rises. Still far too much but the gap between 4 and 2.8, that gap is more than just a starting point. That gap is an entirely new global economy that we can begin to seize.

One of the things that The Paris Agreement did successfully was that it sent a signal to the marketplace. So it is not just a diplomatic agreement amongst nations, but it is a stimulus to the real economy. And the real economy has begun to respond. As of today, there are more than 6,000 companies across the globe who collectively represent 36 trillion dollars, or half the global economy, who have made one or more climate commitments.

These are, for example, commitments to science based emissions reductions targets, commitments to procure 100% of their energy from renewable sources, commitments to only have electric vehicle fleets, commitments to end deforestation in their supply chain and so on. These are companies that are located in 120 different countries. They operate across 10 industrial sectors, and if you look at some of the examples of the companies you'll see that they are substantial.

Unilever, for example, is present in over two billion homes on a daily basis. Walmart is the largest private sector employer in the whole world, and in the United States alone, WalMart has 100,000 suppliers. Interestingly, Walmart also accounts for 11% of all Chinese imports into the United States, which means that when Walmart makes a decision to go low carbon in its supply chain that has reverberations right across complex global supply chains and forces governments to think about the type of policies they need to put in place domestically.

You'll also see, an Irish illustration on this particular slide: CRH, on the bottom corner, which is a building's company that is also been to the fore in making a science based emissions reductions target.

I also mentioned the companies are making commitments to procure 100% of their energy from renewable sources. This has become important for a couple of reasons. First and foremost, for what it means for emissions reductions, but also because these companies are now making investment, employment and location decisions based on their ability to procure that green energy. For example, the government of Quebec is now going around the world speaking to companies and saying to them, 'Why don't you relocate your data centre from Alabama that will only provide you with a monopoly energy company offering you fossil fuels and why not instead, set up your company in Quebec, where you can have all the clean hydropower you might want?'

These companies are now the vanguard of climate action. But they're also an influence target that we can approach with a new brand for a sustainable Ireland and attract these companies to come into the country and invest and create high paying jobs and help with economic development.

That brings me to the final section, which is to leave you with some ideas for how you might think through some of these issues over the course of the conversation during the rest of today.

The first is it's always important in my experience that we begin by asking ourselves the right question. I recently had occasion to visit with the state government of Vermont, where I live in the United States. What struck me was that the question they are asking themselves in Vermont is, 'How can we reduce greenhouse gas emissions?' An important question but Vermont only accounts for .1% of 26% of global emissions.

So if they were to focus their entire attention on raising their climate commitment from, let's say, a 50% target to a 55% target, it would really have little consequence for what we're trying to do globally. However, if you ask a different question, 'How are we working towards decarbonisation?' Then a whole series of different policy options begin to emerge.

For example, in 2007, Vermont was one of a number of states that brought to the Supreme Court something called Massachusetts versus EPA. This was a landmark ruling of the US Supreme Court that obliges the federal government to regulate greenhouse gases as a pollutant under the Clean Air Act. It was this landmark court case that forced the US government to put in place a clean power plan, CAFE standards to reduce emissions and fuel in cars and to negotiate in good faith globally through the U.N. Process.

My point being, the moment you get away from a narrow question and begin to have an expansive conversation, that is when you open up new policy opportunities, new interventions that you can use to contribute to decarbonisation.

But the third question is equally important and that is, 'Are we actually not only addressing greenhouse gases, but are we addressing issues of resilience?' And 'Are we specifically beginning the process of building an inclusive and shared prosperity?'

What I'm interested in and what I would encourage all of you to be interested in is to focus on the third question. Do not spend your time only thinking about low carbon or even net carbon net zero in Ireland, but think about how we create a holistic approach that involves reducing emissions, enhancing resilience and building an inclusive prosperity that enables us to seize the opportunities of this new climate economy.

When we get to the first part, which is reducing emissions, there's an old adage in climate change that the problem is essentially 'fuel, food and footnotes'. Fuel means our energy production, our energy mix. It means energy efficiency. It means electricity generation and it also means, the fuel that we use for mobility and transportation.

Food, obvious to everybody living in Ireland, that it relates to the clearing of land, the way in which land is then subsequently used and the emissions coming from livestock.

The rest are all interesting, but not nearly as important if we fail to address those first two issues. As a consequence, if we really want to be serious about addressing climate change in this country, we've got to be serious about the energy composition and we've got to be serious about addressing emissions, particularly from livestock.

Now moving on beyond emissions reductions, we've also got to think about how we diagnose climate risk and, as a consequence, how we go about the process of building resilience. In my experience over the last number of years, I have found that companies right around the world, irrespective of sector, are misdiagnosing climate risk and as a consequence of that, they are exposing and amplifying the threat that they face.

The reason they do that is because they understand only two of three dimensions. They understand, for example, that climate change is leading to more weather events. In other words,

more hazards. They understand that their factories and facilities might be in the path of some of those hazards.

But what they don't understand is the third dimension, which is vulnerability. To put that into context when Superstorm Sandy passed through New York in 2012, Verizon, which is one of the leading telecommunications companies in the country, lost a billion dollars, lost network connectivity, lost consumers, lost ground to their rivals. The reason that happened is because they had copper wire cabling and copper wire cabling disintegrates in saltwater. Their competitors have fibre optic cabling, which does not disintegrate in salt water. Verizon did not understand its own underlying weakness and therefore, it suffered massive damage, which it which it has still not completely recovered from.

There is, unfortunately a more tragic illustration of the issue of vulnerability as the third dimension of understanding climate risk. And that is the way in which climate risk has a disproportionate and even asymmetrical impact on vulnerable and marginalised communities. As someone who goes around the world talking about climate change, I obviously present an awful lot of statistics and graphics.

But for me, the number one most important statistic I have ever presented was that 90% of all the fatalities to an extreme weather in Bangladesh event in 1991 were women, 90% of all fatalities! How could that possibly be the case? Were women exposed to an event that men were not exposed to? The answer is no. The answer is that women could not leave home without a male guardian. Women had never been taught how to climb a tree. Women had never been taught how to swim. Women did not have access to information and therefore did not know that the storm was approaching. Women did not have access to decision making and therefore, could not work with their local municipality, least of all the national government, to put in place strategies for resilience that accounted for their lived experience. Women did not have access to justice and therefore could not hold people accountable for the failing of public policy. Women did not have access to financial products or services, therefore, could not develop savings nor access credit lines to have the financial resources necessary to rebuild their lives.

The tragedy of this is that this pattern is repeated in other parts of the world. On the bottom right hand corner of this slide is a statistic from Hurricane Katrina in the United States, which also illustrates that 80% of the people left behind in New Orleans after Hurricane Katrina were women.

The point being, if we want to be serious about enhancing resilience, it is not enough for us to build a sea wall. It is not enough for us to build a flood defence. It is not enough for us to put reinforced concrete into a building. We have to tackle the structural discrimination that effects low income populations, people of colour, immigrant communities, the elderly, the disabled and women right around the world.

In other words, social safeguards, social safety nets and a commitment to human rights has got to be a core part of any climate strategy and not just a policy to reduce emissions and not just a policy around infrastructure.

One of the things that's most urgently needed is we need to have joined up government in our response to all of this. Not just joined up government horizontally across government departments, but joined up government vertically as well. From the central up to the European level and from the central working with other governance spheres right across the island.

We need to take this out of a Ministry of Environment or out of a Ministry of Climate Change. And we need to get serious in, for example, in Ministry of Education. Because if we are to build a low

carbon climate resilient and inclusive world: Who is going to weatherise our home? Who is going to build the wind turbines? Who is going to engage in sustainable and regenerative agriculture? Who is going to put the solar panels on our roofs? Who is going to build the next generation of electric vehicles?

All of this requires investment in human capital, and that means a strategy from the Department of Education.

Who is going to provide the initial investment that will make all of this happened? That means we need serious contributions from the Minister of Finance.

One of the things I've outlined on this slide is that one of the great success stories of Ireland in my lifetime has been the work of the IDA in attracting inward investment into this country. It used to be that the IDA's basic message was come to Ireland: we have a large, young, educated, capable workforce, we have low corporate tax, we have English speakers and we have access to the single market. All of that was a wonderful boon to economic development in Ireland but we now need to change the tagline of the IDA from 'at the heart of Europe' to 'at the heart of the new climate economy'. Because if we want to invest in this country and if we want to attract the private capital that drives investment, we need to have a story about a green brand Ireland that we can take to these companies right across the world to bring their innovation, their jobs and their investment to the country.

We also need to tackle things like public procurement. 19% of GDP in the European Union, and 19% of GDP in China are related to the procurement of public contracts, which means our tendering process should not be awarded to those who offer the lowest cost option. They should be offered to those who offer the lowest carbon option and that would again send a really powerful stimulus to the real economy. Then we need to tackle issues of planning and zoning.

Many of you will be familiar with the fact that Apple decided to relocate from Athenry to Denmark because of difficulty in getting zoning for renewable power generation. This is just one small illustration of the fact that right across the world, if a company cannot access renewable energy from the grid and you don't allow them build on-site renewable energy sources, then because they have made these commitments to their shareholders, because they are now required under fiduciary responsibility to honour these commitments, they will pick up and they will go somewhere else that will offer them a green economy.

It's going to be important that we learn how to make tough decisions. The minister said earlier that there is no silver bullet and that is the reality of our situation. We're going to get to ambition, not through a giant leap, but through an accumulation of ambition made through many, many small steps. That means we're going to have to have difficult conversations with vested interests about the nature of the transition on how urgent it needs to be.

But as part of that, we absolutely need to focus on the just transition because as we build a new climate economy, we cannot afford to leave people invested in the old high carbon economy behind whether those air people working across Appalachia in coal, whether they're people working in farming or peat, whether it's the countries of the Middle East who are dependent on oil and gas.

We need their human capital. We need their financial capital. We need their political buy-in. We have seen right around the world what happens when we have a political populist backlash to climate policies and if you don't believe me, just ask President Macron how he's feeling about the yellow vests.

We need to have societal consensus. One of the great things about coming to Ireland or Europe writ large is that irrespective of political ideology, there is an understanding of climate science. There is a commitment to climate action and the dispute is not about whether it's happening it's about how we respond. In other parts of the world that societal consensus has not yet been built.

So I really urge you to think about the wonderful success story of the citizens assemblies and where that has taken us in terms of the report of the Oireachtas. What that has generated not only in terms of policy recommendations but what it has generated in terms of citizen buy-in to the policies that will subsequently follow.

Take that model and export it to other parts of the world that are in bad need of that same spirit of collaboration amongst the population at large. One of the things that we need to do is to understand that the term climate change forces an allergic reaction in many people, and so we, as a climate community have got to get better at telling stories.

One of my first jobs working for the Maldives was to go and work in Washington DC. It was my responsibility to go to Capitol Hill and try to persuade US lawmakers to take climate seriously. I found if I went and spoke about ecology, a certain number of people would open the door and the rest would shut the door in my face. But if I went the next day and spoke about competitiveness or the day after and spoke about human rights, I would find that an expanded vocabulary of arguments would lead to more people engaging in the issue. When Senator John McCain decided to take a leadership role on the issue of climate, it was not because he cared about environment. It was because the admiral of the sixth Fleet of the US Navy told him that piracy off the Horn of Africa was a consequence of young men who used to source their living from the land now being forced to take to the high seas in order to provide food for their family. It was a national security argument that won the day.

One of the things we need to do as a community is to reach out beyond our comfort zone, have uncomfortable conversations, try to persuade, look for the converts and use a different vocabulary of arguments.

The final thing that I would like to say is that we have seen a lot of momentum on this issue over the course of the last year, whether it's the Extinction Rebellion people in the United Kingdom, or the advocacy of someone like Greta Thunberg, it's very, very important that as we take the message of climate change to the world, that we don't only focus on the threat, but that we actually say to people that we're using this moment to build a better world.

That will be a world of better prosperity of higher paying jobs, of jobs that are clean and do not affect public health the way mining for coal does. It's also a prosperity that we're going to share more equally across our society. I believe that if we do that, we can bring more people into our constituency.

One of my great heroes in life is Eleanor Roosevelt. When she died, it was said of her that she would 'Rather light a candle than curse the darkness.'

I think too often in the climate community, we focus on the darkness and it's now time that way focus on the light and the opportunity that's going to be created.

I want to thank Matthew and his colleagues for inviting me today. I want to thank you for your attention and as I said, my email is here on the screen, and I'm always delighted to talk to anybody who shares my passion for this subject. Thank you.