



**Report on Opening Ceremony, High Level Segment of COP26
& Sessions attended 3rd – 6th November 2021**

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Opening Ceremony - United Nations Climate Change Conference 2021 - COP26

Small piper Brighde Chaimbeul, from Sleat on the Isle of Skye, opened the ceremony with her own arrangement of the traditional melodies An Leimras and Harris Dance.

A video of space-themed images followed with commentary by physicist Brian Cox, Professor of Particle Physics at the University of Manchester and The Royal Society Professor for Public Engagement in Science.

Yrsa Daley-Ward, English writer, model and actor read an inspirational poem she had written 'This is your invitation to lead with light'.

Boris Johnson, UK Prime Minister, welcomed everyone to COP26 and Glasgow. He warned world leaders that the longer they fail to tackle climate change, the higher the cost when forced by catastrophe to act. He highlighted the huge outputs of carbon dioxide into the atmosphere and the impact of increases in temperature of 2% or more which could eventually lead to the loss of whole cities such as Miami, Alexandria or Shanghai.

Referring to the phrase frequently used by the young activist Greta Thunberg, he said that the promises made under the Paris Agreement to limit temperature rises would be nothing but 'blah, blah, blah'. He warned that future generations would not forgive world leaders if they failed to act, and they would be quite right to do so. He noted that we have the technology, the funds and the opportunities, but that we needed the will to fight back against climate action - to defuse the bomb.

In conclusion he referred to the Paris Agreement as the ship for climate change saying, 'let us now launch that ship'.

Youth climate change campaigner Brianna Fruean from Samoa referred to the initiatives of the youth, noting that we all have the power to do better and the weapons to make the change. She said "The real question is whether you have the political will to do the right thing, to wield the right words, and to follow it up with long overdue action".

Walelasoetxeige Paiter Bandeira Surui, youth activist from the Amazon Rainforest explained that her father was an Amazonian leader and her friend was murdered for trying to save the forest. Referring to the deforestation and global warming, she said "It is not for 2030, or 2050 - it is now! We need a liveable existence and future".

UN Secretary General, Antonio Guterres said the six years since the Paris Agreement had been the hottest on record and the world faces 'a moment of truth'. He pointed out that the planet is changing before our very eyes, oceans are increasingly rising, the Amazon Rainforest is emitting more carbon than it absorbs, and we are careering towards climate catastrophe and an increase of at least 2 degrees Celsius +++. He said, "The science is clear - we know what we have to do and the goal of 1.5 degrees Celsius must be kept alive".

Mr Guterres continued by stressing the importance of all countries working towards this goal, even the developing countries and he stressed the importance of phasing out coal. If commitments fall short following COP26, countries must revisit their plans to end their use of coal. He explained that he is establishing a group of experts to measure and analyse those countries who fall short of working towards net zero.

He concluded by saying that funding towards climate action must be a priority and there needs to be more public and private finance, stressing that multi-lateral agreements between banks is essential. Calling for greater support for developing countries, he said that COP26 must be a moment of solidarity.

HRH The Prince of Wales addressing those present referred to the impact of COVID-19. He noted that time was running out, that we must reduce emissions immediately and remove what is already in the atmosphere and that nature is our best educator. The scale and extent of the threat of climate change means we must all come together to enable every sector to take the action required. He said "We need a military style campaign to mobilise a private sector which can take action" and highlighted three key areas to address:

- 1) global industries to map out their action and strategy required
- 2) who pays and how e.g. private finance and investment to deliver clean energy.
- 3) which are the most emitting industries - fuel, transport, food, fashion, etc.

He concluded by saying "Your excellencies, ladies and gentlemen, many of your countries are already feeling the devastating impact of climate action, through ever-increasing droughts, mudslides, floods, hurricanes, cyclones and wildfires. Any leader who has had to confront such life-threatening challenges knows that the cost of inaction is far greater than the cost of prevention. So, I can only urge you, as the world's decision-makers, to find practical ways of overcoming differences so we can all get down to work together to rescue this precious planet and save the threatened future of our young people".

Sir David Attenborough, broadcaster and naturalist presenter, urged delegates as they spend the next two weeks at COP26 to acknowledge the impact on climate change of carbon emissions and their relationship to temperatures.

He noted that as populations grew, we initially had a stable climate but with the increase in industries, we now face huge releases of carbon and climate instability. He said, "We are already in trouble" and he pointed out that those making the most impact are not the most impacted and he referred to the impact on animals and children of the future adding "We know how to stop the release of carbon - 1.5 degrees must be our goal. New industries with clean air must be the way forward". He also pointed out that no advanced nation is yet sustainable and that people alive today will stop and ask whether COP26 agreed to stop climate rise?

Aligning his comments with those of HRH The Prince of Wales, he referred to nature as our ally and that we must leave no one behind. He noted that the young people will give us the impetus to rewrite our story and turn the tragedy of climate change into triumph.

His final words of inspiration were "We can do it. The world is looking to us and we must deliver".

High Level Segment of COP26 – November 1 & 2

Following the Opening Ceremony of the World Leaders Summit, the first part of the high-level segment of COP26, the sixteenth session of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol, and the third session of the Conference of the Parties serving as the Meetings of the Parties to the Paris Agreement was held from the afternoon of Monday, November 1 until the evening of Tuesday, November 2. During this time, the Heads of State and Government who had registered and confirmed their wish to deliver a statement had an opportunity to do so.

Their statements covered the following key points and objectives:

- Acknowledgment that climate change is a global problem
- Collaboration and collective action are required
- Highest impact is on the poorest countries
- Expectation that COP26 will accelerate action by 2030
- Determination to take decisive action to tackle climate change
- Aligning the outcomes with those in the Paris Agreement
- Vital importance of limiting global temperature rise to 1.5 degrees Celsius
- Mitigation – efforts to reduce or prevent the emission of greenhouse gases
- Adaptation – to the impacts of climate change to survive
- Finance – scaling this up from all sources both private and public
- Cutting out global carbon emissions by 2030
- Phasing out of coal powered industries by all countries

All leaders highlighted what they had managed to achieve in their own countries, the areas they had been unable to address due to limited finances, whilst stressing the need for additional finance to be able to take further action.

Leaders from the small island states all highlighted their increased vulnerability with regards to rising sea levels and nowhere to hide when extreme weather events such as hurricanes occur. There is the additional impact on the economy of the island inhabitants due to disruption to fisheries, coastal erosion and, in many cases, tourism as well.

Many leaders highlighted the financial pressures they are facing, which have been worse made by the combined pressures of the COVID-19 pandemic and climate action. During the two days, it became clear that states are still trying to deal with the impact of the COVID-19 pandemic whilst at the same trying to address the issues surround climate change. Additional finance must be made available if they are to successfully address both areas and ensure that no one is left behind.

COP26 – November 3 – Theme for the day – Finance

First session: Urban LEDS - Time4MultilevelAction Dialogue: Finance flowing to accelerate Climate Action: Innovation and Partnership



This session was organised by the International Council for Local Environmental Initiatives (ICLEI) World Secretariat, ICLEI Europe and UN Habitat. It was divided into three parts giving an insight into:

- 1) Local government representatives from Europe, South America and Africa shared their challenges to secure finance
- 2) Financial institution representatives highlighted the instruments they offer
- 3) The third and final part was an exchange between the local governments and financial experts discussing how they could improve collaboration and upscale action, thus allowing cities to accelerate their climate ambition.

Key points from the session:

- Twenty-five cities are currently being supported with their climate action work – the aim is to support 180
- Transregion Action Programme (TAP) is supporting a wide range of projects and Meridian has been co-recruited to help with this working with UNFCCC to get projects off the ground.
- Finance is coming from private investors with regards to energy funding
- Recycling projects are subject to feasibility studies but do attract funding
- Funding for transforming cities is crucial for progress
- Decent transport systems are key to progress
- Local Climate Adaptation Fund is available for local governments to have access to funding.

Second session: Fourth High Level Ministerial Dialogue on Long Term Climate Finance



The Presidency convened the fourth High Level Ministerial Dialogue on Long Term Climate Finance, which was informed by the reports on the in-session workshop on long-term climate finance and the fourth (2020) Biennial Assessment and Overview of Climate Finance Flows. This dialogue included three panels on enhancing support for developing countries and realising the \$100bn goal, supporting a financial system for a net zero and resilient future, and scaling climate finance to mobilise the trillions needed in developing countries. This session followed previous dialogues at COP20, COP22, and COP24.

1. Enhancing Support for Developing Countries and realising the \$100 Bn Goal

The first panel was chaired by Jochen Flasbarth, State Secretary, Ministry for Environment, Nature Conservation and Nuclear Safety (BMU), Germany.

Annika Saarikko, Minister of Finance for Finland, said that she believes the coalition of 57 countries representing different levels of progress and commitment will work well. Complex financial multilevel systems work well because careful financial planning leads to transparency. More analysis and research are needed with regards to the extent of the impact of climate change.

Yannick Glemarec, Executive Director of the Green Climate Fund, the form of finance required needs to be open and able to adaptation to the volume of work required.

Dr Akinwumi A Adesina, President of the African Bank Group noted that there was a need to assess GDP's and individual country's progress.

The Rt Hon Nigel Clarke, Minister of Finance & Public Services for Jamaica, highlighted the fact that the challenge of managing climate change finance is huge but not insurmountable. Referring to Jamaica, he noted that they and other countries which are small island states, have frequent cycles. They have a 'catastrophe bond', which pays out to Jamaica when tropic cyclones exceed a certain level. This bond was taken to international markets and was well received with investors and was well remunerated. This method of financing for vulnerable countries addresses issues before the event rather than when it happens. It was important to look at a multi-layer approach with cyclones being the final stage to ensure they are prepared.

Raising money for adaptation regarding climate change demands vast amounts of funds and needs private sector investment and, therefore, products must be attractive to investors so that they can earn a reasonable return.

2. How to Support a Financial System (for Climate Change) for a Net Zero & Resilient Future.

The second panel was chaired by the Rt Hon Rishi Sunak, Chancellor of the Exchequer for the UK and covered how to support a financial system for net zero and a resilient future.

Mr Sunak highlighted the need to get finance to those who need it most and it was important to note that we can now invest in climate transitions.

Carlos Dominguez, Secretary of Finance and Chairperson Designate of the Climate Change Commission in the Philippines. He said it was important to provide financial aid to those countries changing from fossil fuels to eco fuels for example. He noted that the Philippines is committed to the fact that the biggest transmitter of CO2 should bear the heaviest cost. He added that they had developed their progress with the UK and using the scientists in the Philippines.

Azucena Arbeleche, Minister of Finance for Uruguay, noted that they had made a lot of progress. He stressed the importance of incentives together with taking measurements, adding that the cost of borrowing must equal the progress on the goal. Alignment of incentives will help progress and achieve goals.

Alison Rose, Chief Executive of the NatWest Group, referred to the Glasgow Finance Group which was comprised of a large number of companies who have committed

to achieving net zero by 2050. To get this fund moving more rapidly, countries must develop clear practical steps to address climate change and achieve net zero. Lots of private/public partnerships are happening and she referred to the Earth Shot Prize for deforestation. Public and private sectors must work together. NatWest had committed £100bn to help small to medium sized businesses in their transitions but they must be accountable. She added that the collaborative approach is key to the success of COP26 – we cannot afford to wait.

Mathias Cormann, OECD Secretary-General, noted that to get to net zero governments should be directing finance away from those projects which support fossil fuels, etc. He noted that 10% of Recovery Money has been directed to negative projects on fossil fuel. He added that \$US160 billion of the Official Development Fund would now be fully aligned to the Paris Agreement.

He noted that in order to meet the infrastructure needs of low and middle-income countries, President Biden and G7 partners had agreed to launch a bold new infrastructure initiative 'Build Back Better World (B3W)', to help narrow the \$40+ trillion infrastructure need in the developing world, which had been exacerbated by the COVID-19 pandemic. He added that we continually need to find new ways to better support the transition.

Carlos Dominguez noted that it was particularly important that multi-lateral banks support these projects, which demonstrates confidence in the projects and should open up finance from the private sector.

Azucena Arbeleche, Minister of Economy and Finance of Uruguay, said that we need to 'walk the talk' – public, private banks, corporate and private sector. In Uruguay they have a 'Step-up or Step-down' bonus depending on success/progress. We need to be able to do joined up thinking and take action.

Mr Sunak referred to a new type of bonds available for financing climate action projects – are these the way forward? Ms Rose stressed the need for clarity on both sides i.e. lenders and borrowers.

3. Scaling Climate Finance to Mobilise the Trillions needed in Developing Countries

The third panel was chaired by The Lord Nicholas Stern of Brentford, IG Patel Professor of Economics and Government and Chair of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics (LSE).

Lord Stern started by saying that we must deliver the first trillion in the next year. He went on to highlight the five components:

- 1) Bilateral funds - \$60 billion per year
- 2) Support for Concession Funds
- 3) Expansion of multilateral development banks to \$90 billion per year by 2025
- 4) Private sector funding needs to be ramped up considerably
- 5) Innovative finance e.g. philanthropists

Sri Mulyani Indrawati, Minister of Finance for Indonesia, noted that we need to discuss the gap of \$100 billion now. For Indonesia they will need contributions from overseas because currently they are aiming for zero carbon emissions by 2060 or sooner. They need \$270 billion to achieve this and during the current year their contribution was only 21%. She added that they will maximize any funding they get and referred to the Project Development Fund and Viability Gift Fund created by Indonesia. All of this goes towards analysing viability of projects. They also issue Green Bonds which have a very rigorous review scheme. To support climate change funding, they also have a fiscal framework which encompasses be accountable, be coherent and be credible.

Maktar Diop, from Senegal, Managing Director and Executive Vice President of the International Finance Corporation. He stressed the need for a flow of projects to assign resources. Countries need to commit to long-term programmes, to decrease the cost of new technology and simplify the processes. He also referred to bonds for investors to buy into. He highlighted two further key elements needed 1) to bring down the cost of capital and 2) to increase the flow.

Remy Rioux, Chief Executive Officer of the French Development Agency, Chairman of the International Development Finance Club (IDFC) and President of Finance in Common Summit (FICS), said he was very pleased to see the work of developing countries and their commitment to climate change. Now we need to align the finance and we need to speed up the renewable technology.

Since 2021, there had been a huge increase of financial commitment by France and the link between climate finance and biodiversity finance. Also, since 2021, 26 institutions had increased their finance and would now be agreeing to committing \$3 trillion by 2025.

Mr Rioux referred to the level of sustainable finance for governments bringing together all the banks of the world. He also referred to discussion starting in Glasgow between Mark Carney and the banks with regards to ongoing finance for climate change.

Lord Stern concluded the session by noting the need to continue to build on the finances with the trillions needed to address climate change.

Sri Mulyani Indrawati highlighted the need for blended finance from various sources including private finance.

Maktar Diop said that we must not forget that only a small percentage of private finance would go to adaptation, but that technology and adaptation are key. We cannot have reduction of CO2 without inclusion – we must leave no one behind.

Remy Rioux made two key points:

- 1) We certainly need to strengthen and clarify – all government need to clarify their mandates – we need to push for adaptation.
- 2) Turning to private finance, we also need very clear mandates and risk sharing needs to be clarified.

Photo of the Day



The Rt Hon Rishi Sunak, UK Chancellor of the Exchequer

COP26 – November 4 – Theme for the day – Energy

First session: ‘From the Energy Crisis to Better Crops – How can Nuclear help to meet the Climate Challenges?’

Rafael Grossi, International Atomic Energy Agency (IAEA) Director General, was interviewed by Gillian Tett, author and Financial Times US editor-at-large discussed how the world could manage to address both the climate crisis and the energy supply crisis.

Key issues covered during the session:

- Important to note that other forms of energy are weather-dependent e.g. wind and solar.
- Disposal of nuclear waste – as an agency IAEA are dealing with this – the volumes of waste are very small and will become even smaller over time compared with other mountains of household waste, etc.
- Is the disposal carried out safely? Mr Gossi said that it was very safely disposed of.
- Bill Gates is trying to recycle nuclear waste in Silicon Valley.
- Countries are collaborating on the production of Small Nuclear Reactors (SMR's) and to make sure they are safer.
- Mr Grossi believes that the big countries like Brazil, USSR and US will continue to have large reactors.
- They are also looking to develop reactors which produce much less nuclear waste – Africa, Latin America, the Caribbean, etc., are looking at projects to address this.
- Referring to the Geo/Political mix, it was noted that Germany, the US and other countries were closing their nuclear plants down and yet China was building twenty and aiming for many more and could become the world leaders. Mr Gossi noted that nuclear would only cover c10% of their energy requirements. With regards to the US, he said they were not phasing them out, the plants are old.
- Some members of the audience expressed concerns about nuclear accidents citing Fukushima in Japan as an example where an earthquake triggered a tsunami in 2011, damaging the power plant forcing over 150,000 people to leave the area as radiation was leaking from the plant. Mr Gossi said that no one died from the radiation – it was the tsunami which caused the deaths.

Second session: Retail – Race to Zero

This session included representatives from H&M, Kingfisher, Walmart, IKEA, the British Retail Consortium (BRC) and EDRA/GHIN the Global Home Improvement Association.

In July 2021 in Geneva Switzerland the retailers H&M Group, Ingka Group (IKEA) Kingfisher plc and Walmart launched a climate change initiative – the Race to Zero Breakthroughs: Retail Campaign in partnership with the COP26 High Level Climate Action Champions and supported by the World Business Council for Sustainable Development. Together they pledged their support to accelerate a movement in the retail industry to drive climate action and encourage other retailers to set out their plans to achieve 1.5 degrees aligned carbon reduction targets in accordance with the Paris Agreement goals.

It was noted that there are vast amounts of travel involved in retail, which covers all areas – food, technology, clothing and homeware. Trade Associations have stepped up to support this initiative and help to accelerate the Race to Zero.

Other key points noted:

- BRC & EDRA/GHIN want other companies to sign up.
- EDRA/GHIN are represented in seventy-four countries with millions of employees and a truly diverse membership.
- IKEA representative highlighted the importance of working with supply chains, the impact on home deliveries, the impact on zero carbon and the expectations of the customer. It is important to secure 100% efficiency of renewable energy right across the supply chain. Circular is part of the process with recycling at every stage and by 2030 all products should become circular.
- Walmart representative noted they have had targets for a number of years and highlighted the importance of collaboration and engaging with customers and suppliers. Trust is key.
- Impact of COVID19 on the retail industry and importance of building resilience. Efforts made over the next two decades will be key. Helping customers to buy more sustainably is important and customer must come first.
- Now need to focus on the 2030 targets whilst remembering that retailers have their own targets. Action, measurement and tracking are now more vital than ever.

Third session – Managing Ship’s Biofouling – A Win-Win Solution to Help Curb Climate Change and Preserve Ocean Diversity

This event highlighted the launch of a new study on the impact of biofouling on GHG emissions undertaken by the Global Environment Facility (GEF) – UNDP – IMO – GloFouling Partnerships project and its Global Industry Alliance (GIA). It covered the impact of biofouling on Green House Gas (GHG) emissions from ships and quantify savings of those emissions resulting from biofouling management measures, highlighting the full potential of biofouling management to contribute to decarbonising shipping in the short term. Biofouling also impacts on the drag of the ship resulting in the need for more fuel. The aim of the study is to measure and address the issues concerned.

It was noted that the shipping industry was in agreement with the research. Long term other approaches will be used.

There was a panel presentation with the following participants:

Chair: David Loosley, Secretary General, Baltic & International Maritime Council (BIMCO)

Opening Remarks: Mr Kitack Lim, Secretary General of the International Maritime Organisation (IMO)

Launch of the GloFouling Partnership Study: Dr Yigit Demirel, Senior Lecturer and Consultant, University of Strathclyde

Panel Session:

Mr Camille Bourgeon, Technical Officer, International Maritime Organisation (IMO) – noted that since 2018 the IMO has had a strategy of reducing GHG from ships and a goal of 2030 for reducing the impact. IMO member states have adopted this.

Dr Bev MacKenzie, London Representative & Manager, Marine Environment (BIMCO) – ship owners to take biofouling management very seriously and there has been a lot of progress from the anti-fouling sector. Coatings can stay fouling free for 3-5 years and if done properly, the impact on biodiversity is minimal.

Dr Andrew Hudson, Head of Water and Ocean Governance Programme, United Nations Development Programme (UNDP) – there has been huge financial investment to address GHG by the UN and this includes biofouling of ships.

Hon Titlupe Fanetupouvava’u Tu’ivakano, High Commissioner for Tonga – Tonga depends very much on shipping for their economy. As an island state, it is very much dependent on marine trade and whale watching. They will work with ongoing

international organisations on biofouling and will continue to uphold the progress to achieve zero by 2050.

Dr Lilia Khodjet El Khil, Technical Project Manager, Glofouling Partnerships – their partnership is a global technical project to deal with the threat to biodiversity. Time is running out and it is important that the other organisations sign up to the global industry alliance – an industry champion for private companies.

Mr Darren Jones, Managing Director, NRG Marine Limited, (Sonihull) Global Industry Alliance – stressed the need for operators and regulators to be involved because often adoption can be a barrier. Savings on fuel will be amazing and the Glofouling process will pay for itself in months. Regulations are needed because this is an urgency and an emergency, and we must be fit for today and tomorrow.

Photo of the day



During energy day, hydrogen was highlighted as the way forward for vehicles as demonstrated in this hydrogen fuel cell electric ambulance.

In June of this year, Mayor of London, Sadiq Khan, launched the first ever fleet of twenty hydrogen fuel cell double-decker buses to join the London fleet, which already has more than 500 electric buses in the core fleet.

There are also plans in place to introduce more hydrogen buses throughout the UK in due course.

COP26 – November 5 – Theme for the Day – Youth and Public Empowerment

First Session – Press Briefing – Breaking the Taboo: Why Diets Must Change to Tackle Climate Emergency – Food Produces one third of greenhouse gas emissions – 75% of agriculture’s emissions are from livestock

The aim of the session was to launch this report, which warns of climate catastrophe without urgent action to cut meat consumption. The author of the report is Chief Policy Adviser at Compassion in World Farming, Peter Stevenson, who said “The central role that food and agriculture plays in the climate crisis has been virtually overlooked by world leaders”.

He noted that by 2050 food production emissions would increase by 87% compared to a lower level for fossil fuels. There is a significant impact from cattle with a lesser impact from crops. The emissions could be reduced considerably if people were to adopt a flexitarian diet, which is primarily a vegetarian diet with the occasional addition of meat or fish. One EU study recognised that emissions need to be reduced by 75% to reach the targets of the Paris Agreement. Another study reported that flexitarian, vegetarian or vegan diets would give reductions between 45 and 75%.

Mr Stevenson noted that producing dairy products including meat using intensive farming methods increases emissions even further. He said that governments will need to intervene at local level and ensure that society as a whole does not eat more than three hundred grams per week. Meals in hospitals and care homes have a higher level of fruit, vegetables, non-dairy products such as nuts, wholewheat, pasta etc. He concluded by saying that we need a tax on factory farmed meat and only eat naturally produced meat, which would mean there would be no increase in the price of food which is healthy.

Second Session – No Climate Justice without Gender Justice

This session was organised by CARE International, and the main speaker was Hedvig Sveistrup, Climate Campaigner.

This was a capacity building session on integrating gender into locally led adaptation planning.

Delegates were asked to consider why gender justice is crucial to building climate resilience for all. The double injustice of climate injustice, which highlights the fact that people living in poverty are the most affected by climate change impacts and have limited resources to face extreme and increasingly unpredictable weather conditions, sits alongside gender inequalities whereby opportunity and resource differs between women, men, girls and boys still exist worldwide. This double injustice impacts on the level of vulnerability, resources, and adaptation options and people of all genders must anticipate or react to the shocks and stresses of climate change.

The session covered a case study carried out in Bangladesh considered the differences in the traditional roles of women and men in their local communities with an explicit focus on women's economic empowerment. In particular, the barriers faced by women for adaptation in agriculture was addressed and it was agreed that poor women are not regarded as "economically active" and only men are considered as 'farmers' and focus of the policy makers and service providers.



A Farmers Field Day (FED) approach was used to engage both women and men and this resulted in transforming structures encompassing the following:

- Women being able to participate in household financial decisions increasing gender equality.
- Functional linkages established between communities and agro-climate service providers.



Policy recommendations made to move forward:

- Recognition of women farmers
- Acknowledgement of gender discrimination:
 - Gender sensitive Extension Services
 - Better implementation of Climate Change and Gender Action Plan

Third Session – Al Gore, Former Vice President of the United States

This was indeed a most impressive and inspiring presentation. Al Gore is well known for his passion for climate action and he shared that passion with us, leaving us all keen to do more.

Key points which he shared with us by showing photographs of disasters which had taken place around the world as a result of climate change.

- Photo of hole in the earth's atmosphere – we are spilling 162 million tonnes of greenhouse gases into the atmosphere every day.
- Agriculture, forestry, mining and landfill all contribute to greenhouse gases, but fossil fuels are the biggest.
- 2021 was the hottest summer on record
- Ocean heat content is building up dramatically and it continues to increase
- Cyclones in New Orleans, Louisiana, New Jersey, Pennsylvania
- Huge floods in New York
- Haiti was devastated by an earthquake
- Pope Francis has pointed out that it is the poor who suffer the most.
- Archbishop Emeritus of Cape Town, Desmond Tutu said that Climate Change is the apartheid of our times
- An atmospheric river in Silicon Valley which carries the equivalent of two Mississippi Rivers now experiences downpours four times heavier than in the 1980's.
- The top ten cities in the world including Kolkata, Shanghai, Buenos Aeries, Glasgow and Mumbai will all be flooded if no action is taken.
- There is migration from the Mekong Delta in Thailand
- Noah's Ark replicas have been built in Kentucky, Hong Kong and The Netherlands
- By contrast, there are serious drought situations in some central areas of the US, Brazil, Mexico, the Czech Republic, France, China, Kyrgyzstan and Australia has now had three consecutive years of drought.
- Water scarcity is now affecting more than 40% of the world's population
- Glaciers across the world are melting at an amazing rate
- More than one hundred million people in Africa are now facing food poverty
- Certain areas of the Middle East e.g. in Oman and a lot of other places near the equator are no longer habitable
- According to The Lancet We could see up to one billion migrants this century

- ‘Dead zones’ are increasingly appearing in the world’s oceans as they lose oxygen at an unprecedented rate due to climate change, sewage pollution and farming practices, presenting an enormous threat to marine life and ecosystems.
- The oceans are now more than 30% acidic since the Industrial Revolution.
- Illegal logging in Brazil is threatening the lives of the indigenous people and species.
- The World Health Organisation believes that climate change is the biggest threat facing humanity – an even greater threat than COVID-19

But we do have the solutions!

- Ninety percent of electricity comes from renewables moving forwards
- Global energy investment is important but there is still insufficient available for developing countries
- South Africa has at last switched away from coal
- The US, UK and EU have now pledged \$85 billion to help South Africa’s transition
- Solar is the cheapest fuel, then wind
- Battery storage is now particularly important
- Bloomberg’s new energy projection is that ‘green hydrogen’ is the way forward
- By 2023 in the US and Europe, electric cars will be cheaper
- Norway hopes to be all electric by 2022 – other countries by 2030

To achieve all the above, we need to change capitalism – we need multi-stakeholder capitalism. We all need to play our part in addressing climate change.

Finally, he referred to Climate TRACE which is an independent group harnessing satellites and artificial intelligence to advance emissions monitoring through direct observations and open data. It monitors and publishes greenhouse gas emissions within weeks. It was launched in 2021 before COP26 and improves monitoring, reporting and verification of both carbon dioxide and methane.

He concluded with a quotation from Nelson Mandela “It always seems impossible until it’s done”.

Fourth Session - Youth – Education and the Environment – Together for Tomorrow – Education and Climate Action

The session started with a video of young speakers from around the world who had attended a mock COP. One speaker referred to the importance of helping indigenous people rather than displacing them.

The first speak was the Rt Hon Nadhim Zahawi MP, Secretary of State for Education who quoted Prime Minister Boris Johnson saying “It’s one minute to midnight on that doomsday clock. The people who will judge us are children not yet born. If we fail, they will not forgive us”. Referring to the Paris Agreement, Mr Zahawi went on to stress the goal of keeping 1.5 degrees alive and that dealing with this was the challenge of our generation. We need to invest in education for our young people because we need more wind turbine technicians, solar engineers, nuclear scientists, etc. He referred to the showcase hour where the Department of Education announced their Climate Leaders Award and National Education Nature Park. These new initiatives which will help nurseries, schools and colleges to have an impact on their biodiversity, whilst at the same time improving children and young people’s knowledge of the connection to nature. He said that it was vital to inspire young people. The goal was also to:

1. Aim to decarbonise all education sites
2. Schools will teach children about climate change and net zero
3. Engage and employ those young people

The Rt Hon Anne-Marie Trevelyan, Secretary of State for International Trade of the United Kingdom, spoke next and said that it is only by working together that we can achieve net zero by 2050. It was vital to aspire to a better, greener future.

The third speaker was Professor Roberto Gingolani, Minister for Ecological Transition in Italy, and a COP26 leader referred to a manifesto for young people which had been discussed for adoption. He agreed that a Youth COP should be an annual event as the young people made a positive commitment. He said that all education is relevant – children, adults, teachers, the general public, etc.

Professor Patrizio Bianchi, Regional Minister for European Affairs, Research, Education and Labour, Region Emilia Romagna, Italy, and the fourth speaker referred to human rights to education. He noted that more education on climate is needed and the young people want it. It was important to give them more capacity

to learn and to get better jobs and opportunities. We need to build a new world and challenge what we have here now.

Ms Stefania Giannini, UNESCO Assistant Director General for Education, said that we have reached the tipping point and we now need to care and change. Education gives us the opportunity for this. She noted that it was some time since educationalists and economists had been present at meetings on climate change at the same time. She went on to say that a recent UNESCO report noted that almost all educational sectors fail to mention climate change. It was time to transform education in the science behind climate change and how to deal with it. Change and knowledge are needed and she thanked the young people for Youth COP.

A video showing pledges from the governments of other nations: Finland, Sri Lanka, Andorra, Cameroon, Spain, Nicaragua and Greece.

We then heard from two young speakers:

- 1) Phoebe Hanson – Mock COP participant, referred to the virtual mock COP held in 2020 and agreed that a number of key pledges had been agreed. She
- 2) said that climate change relating to science and geography needs to be integrated across the whole education spectrum. Teachers want to include it in their curriculum, and this should be supported by governments. Climate must be integrated into every subject. Young people are the future and need to be treated as such.
- 3) Scher Rashid Boig referred to the Youth4Climate Pre-COP in Milan and said that young people want to see climate integrated in the system and each and every part of the curriculum. We need to see all aspects of climate change included in the curriculum.

A panel discussion involving the followed involving the young people.

In his closing statement, Rt Hon Nahim Zahawi MP thanked the young people for their contributions saying that he hoped to work with the panellists to develop the initiatives highlighted. He noted that this had been a first coming together and that he would share the new work at primary level across the panel. Both the UK and Italy would ensure the commitments made today are followed through and he referred to the Education World Forum in January 2022.

Professor Roberto Gingolani said that we were fighting for a clean planet, but it is not enough – we are also fighting for a peaceful planet. How can we live together in this planet? We must work on peace and solidarity as we have with COVID-19. Starting from the base of education to provide continuity with training to share together and live together. Ms Stefania Giannini noted that it is through education

that we have a better society and we must collaborate and work together, learning together.

COP26 – November 6 – Theme for the day – Nature

First Session: Just climate Action - 'The Great Recovery'

Gonzalo Munzo, one of the two UN High Level Champions appointed to COP26, opened the session. He noted that their role is to mobilise people related to governments, non-government organisations and civil society organisations to work together to address climate action. This event took place under a 'Talanoa Dialogue', a process designed to help countries implement and enhance their 'Nationally Determined Contributions' by 2020. It was launched at COP23 under the Presidency of the Republic of Fiji. The Dialogue was mandated by the Parties to the United Nations Framework Convention for Climate Change (UNFCCC) to take stock of the collective global efforts to reduce the emissions of greenhouse gases, in line with the goals of the Paris Agreement, which is to limit the rise in average global temperature to 2°C above pre-industrial levels, and to pursue efforts to limit the increase to 1.5°C.

Mr Gonzo said it was important to determine how we can transition our society in a way which 'leaves no one behind'. He added that many people are disaffected by climate change and climate action. They are trying to analyse the situation today and then position ourselves in a different logic – the right trajectory. We have the opportunity to look at society today and consider all elements moving forwards.

Rajiv Joshi, former Chair of the Scottish Youth Parliament (2005 – 2007), CEO of Bridging Ventures and Lead Author of 'The Decisive Decade Inquiry', also opened the session along with Kumi Naidoo, former International Executive Director of Greenpeace (2019 – 2016) and International Secretary General of Amnesty International (2019-2020).

The following participants were then asked to share their vision for a 'Just future on Climate Change':

Minister Richard Lochhead – a Scottish National Party politician who is Minister for Just Transition, Employment and Fair Work and has been the Member of the Scottish Parliament for Moray since 2006.

Vandana Singh – an Indian science fiction writer, Climate Imagination Fellow and interdisciplinary climate educator. She is also an Associate Professor and Chair of the Department of Physics and Earth Science at Framingham State University in Massachusetts.

Luisa-Marie Neubauer – a German climate activist.

Joshua Amponsem – an environmental activist and the founder of Green Africa Youth Organisation (GAYO).

Cynthia Williams – Global Director, Sustainability, Homologation and Compliance at the Ford Motor Company.

Mary Robinson – first women President of Ireland and former UN High Commissioner for Human Rights, Chair of The Elders, and a passionate advocate for gender equality, women's participation in peacebuilding, human dignity and climate justice.

Brother Phap Dung – a monk from Vietnam who was ordained in 1998 as a member of the 'Apple' family at Plum Village France.

All participants stressed the importance of collaboration and working together, living with less and moving forward in a positive mode. The importance of holding governments to account with regards to their commitments to tackling climate change was highlighted by everyone.

Second session: The Ocean Ecosystem – From Green to Blue

The two speakers were Andrea Vera, Senior Manager Natural Carbon Solutions, and Julian Ekelhof, Senior Director Climate Solutions at Forliance GmbH.

Andrea opened the sessions by explaining that blue ecosystems cover the main part of the southern continents except Antarctica and are comprised of sea grass meadows, tidal salt marshes, grass herbs and mangroves. The main focus of this session would be on the importance of the mangroves in our ecosystem. She noted that there are over one hundred mangrove species worldwide. Since 1996 there has been deforestation of mangroves covering an area thirty-five times the size of Glasgow and this has had an enormous impact on the ecosystem worldwide and especially with building on coastal areas.

Julian referred to the importance of preserving mangroves in areas such as the Sundarbans in Southern India do to the threat to wildlife such as the Bengal tiger. He noted that mangroves absorb 2-5 times more carbon than other trees and also ten times faster. They also act as filters improving water quality and can be used for timber and to create areas for fishermen.

Marine conservation in the eastern part of the Philippines involves restoring the mangrove areas and creating fishponds, which once restored will be protected by law. To date 20,000 mangroves have been planted and there are plans to plant a further 10 – 20,000 each month.



On the south eastern coast of Kenya near Mombasa, the Forest Restoration Agency is turning the mangroves into long-term sustainable forestry areas. Working with the local communities, they are helping them with bee keeping and fish farming to ensure the long-term outlook. They are also working with the youth as rangers and the communities to establish the mangroves as a grassroots organisation. The goal is to plant five million mangroves over the next seven years.

Forliance are taking positive steps towards mangrove restoration and protection and are currently developing a sustainable mangrove methodology together with Gold Standard, which was established in 2003 by the World Wildlife Fund and other NGOs to ensure that projects that reduce carbon emissions feature the highest level of environmental integrity and contribute to sustainable development.



Finance is key to achieving all of the above and it is currently a limiting factor. Moving forwards, it will be vital to secure funding from both the public and private

sectors. Current funding streams include the Green Climate Fund and Carbon Market funds, but more investors are needed.

Third session: - The Paris Agreement – Implementation and Compliance Committee

The Paris Agreement, the legally binding international treaty on climate change, was adopted by 196 parties at COP21 in Paris on 12 December 2015 and came into force on 4 November 2016. The long-term temperature goal is to keep the rise in average world temperature well below 2 degrees Centigrade and preferably limited the increase to 1.5 degrees centigrade. The US withdrew from the Agreement in 2020 but re-joined in 2021 and of the four states which have not ratified the agreement, Iran is the only major emitter of greenhouse gases.

Mr Felix Ross, Director of the Legal Affairs Division and Principal Legal Advisor, UNFCCC, opened the session. He explained the role of the committee in covering the parties' compliance with the Paris Agreement. The Committee is the only constituted body that has not met live during the last two years due to COVID-19, but they have been working together virtually.

The Committee is there to support the parties to comply with their commitment to the Agreement. Their work is challenging and not always popular with the parties and, therefore, they need to be supportive and hopefully, over time, the parties will see they are being helped rather than told off. In the future, they would like everyone to share their views of the Committee.

Mr Haseeb Gohar, Co-Chair of the Committee, thanked participants for joining the session. He said that the purpose of the Committee was to strengthen the global response to climate change and the temperatures of the sea above and below sea level to 1.5 degrees centigrade in a way which would not affect food security. Obviously, commitments depend on individual national circumstances.

Referring to Article 15, he noted that the work of the Committee was determined by this article, noting that countries which do not comply can be challenged.

There is a requirement for reporting financial commitments and resources including those allocated to developing countries. The Committee is also allowed to:

- 1) Engage in dialogue with the party concerned with regard to finance, technology and capacity building
- 2) Make recommendations to parties concerned about addressing the issues and developing a plan
- 3) Produce a report on the above

Mr Gohar noted that he is a representative of the Government of Pakistan and they have pledged to comply with regard to greenhouse gas emissions by 2030. Ten billion trees will be planted across the country and remove five hundred tons of CO₂ by 2040. He is very keen to ensure compliance by all parties.

Professor Dr. Christina Voigt, Co-Chair of the Committee, who had organised the event thanked the Secretariat for their help throughout the past two years.

She explained that the purpose of the Committee was to enhance the effectiveness of the Agreement's implementation and compliance, as well as to ensure accountability of the parties for their performance. It serves to enhance mutual trust and confidence and facilitate implementation and compliance with the provisions of Paris Agreement (Ar5. 15.1). Expert-based, facilitative in nature, transparent, non-adversaria, non-punitive (Art 15.2 PA). The Committee does not impose sanctions or penalties. It is an enabler for parties to meet their commitments.

There are currently twenty-four members of the group altogether, but they are not all lawyers rather a broad scope of competencies. There are seven groups/constituencies – African States, Asia-Pacific States, Eastern European States, Latin American and Caribbean States, Western European and other States, small island developing states, and least developed countries. Members of the group serve for three years and they can be re-elected for a further three years. Currently there are three vacancies in the Latin American and Caribbean States.

Ms. Voigt explained how an issue gets to the Committee via three possible routes:

- 1) By Party
- 2) By Committee
- 3) By Committee with consent of the Party

The Committee can do the following to help:

- 1) Engage in a dialogue with the party to share information, identify challenges and recommend solutions.
- 2) Assist the Party in engaging with support bodies and arrangements and make recommendations to the Party (and communicate those to support bodies/arrangements).
- 3) Recommend development of an action plan.
- 4) Issue findings of facts in relation to matters raised.

She concluded by saying that she hopes the Committee will live up to its expectations and that parties will test it and use it. It will be necessary for it to be used if it is to live up to the Paris Agreement.

Ms Dian Tan, an alternate member of the committee for the small island developing states, spoke next. She noted the enabling role of the committee but that she is a lawyer.

She re-iterated ways in which issues come before the committee, explaining further:

- 1) Self-referral – this is based on the party's consent which is crucial.
- 2) Initiation by the committee – this is where a party's consent is not required and relates to the party having to produce reports on their progress.
- 3) Discretionary initiation – this involves cases of significant and inconsistent reporting. This is an important part of the Paris Agreement, and it is also important that the parties involved understand how others are performing.

The role the committee can play regarding systemic issues e.g. eco system of how compliance is taking place. The committee must be an enabler in these instances without changing the words or interpreting the rules of the Paris Agreement.

Mr Tomonobu Satu from Japan, an alternate member of the committee from the Asia-Pacific States, explained that he had been collaborating with the committee for two years. He covered three areas:

- 1) Guiding Principles – outlining
- 2) g the Articles and Paragraphs used to address issues.
- 3) Discussions – outlining the measures which can be taken to address the issues.
- 4) Conclusions :
 - a. Provisions and rulebooks give a set of tools
 - b. To facilitate implementation and promote compliance
 - c. The committee will develop clarity on measures and outputs

The final speaker was Ms Jimena, Professor of International environmental law and member of the Kyoto Protocol Compliance Committee. She said that she believed that progress of the committee to date had been good considering the circumstances with regard to COVID-19. She referred back to the Kyoto Protocol and the ongoing linkage with that treaty created in 1997 by the United Nations that aimed to reduce carbon emissions worldwide. In order to live up the spirit of the committee, we need to determine how we can get parties to live up to their agreements. It was also especially important to get systemic issues sorted out at the beginning. The third option is to promote compliance.

Fourth Session: Tracking Credible Climate Action

This event was hosted by the UNFCCC in partnership with Camda and the ClimateWorks Foundation. The Global Climate Action Portal is a UNFCCC online platform which tracks the climate action of non-Party stakeholders from around the world. Over 25,000 non-Party stakeholders from over 160 countries, and 151 co-operative initiatives, including initiatives announced at the UN SG's 2019 Climate Action Summit, are now registered on the portal. An announcement was made regarding the enhancements made to the UNFCCC Global Climate Action Portal (GCAP) to support the tracking and recognition of credible action. There was also a new declaration by Camda, a community of data and analytical experts which was formed in 2017 in response to a request from the Executive Secretary of the UNFCCC.

Ian Tout, UNFCCC, advised that since 2018 there has been a map interface on the portal, which enables credible recognition. Countries now have a better place on the portal working with non-government stakeholders – States and Regions, Cities and Businesses, Investors, and International Cooperative Initiatives. There are also 'Country Profile Pages' which include the work of stakeholders. The work of non-party stakeholders is recorded and there is now a tracking facility available on the portal. Without the inputs from the non-party stakeholders, the portal would be weaker.

The work of Camda has been incorporated into the portal and this is important for impact - tracking progress of countries and stakeholders is all significant in recording the progress on climate change. Their mission is to show how the world is transitioning to climate neutrality and resilience in line with the goals of the Paris Agreement.

Climate Action Data 2.0 is a Camda working group launched in June 2021 and it has more than sixty participating organizations. The workgroup is convened by the Camda secretariat and co-convened by Data-Driven EnviroLab and Open Earth Foundation.

Resilience and adaptation are two key elements moving forwards together with financial actions by financial institutions.

Nikki Bartlett, Chief Input Officer for the Climate Action Portal, noted the increase in data received adding we need to see credible plans on how organisations can implement their plans. Companies must report against their progress. Data is not solely the answer – it needs to be embedded into governance processes. Less than 25% of banks recorded their CO2 emissions and this needs to be addressed. Over

the next few years, we need to ensure that nature as well as climate is included in the data.

Antonio Guterres, UN Secretary General, who spoke online noted that he had introduced a number of initiatives two years previously and that credibility and transparency are key to reporting. He said that he thought the enhanced portal looked fantastic and that it was important to continue working on adaptation, credibility and finance. He noted that it covered a lot of areas including sustainable transport in the pilot phase. There was critical mass of non-state actors who are keen to commit and record their actions.

Surabi Menon, Vice President of Global Intelligence, ClimateWorks Foundation, also advised that finance and adaptation are especially important. She said that there was now a lot of data on deforestation, carbon reduction promises, etc., but that, obviously, this needs to be converted into action. She added that she feels this time the situation feels different, but we do need to hold ourselves accountable.

This session was extremely helpful in gaining an understanding of how data on climate action is being recorded. However, as with the previous session on The Paris Agreement – Implementation and Compliance Committee, the success of the portal will be down to the action of countries and non-party stakeholders in actually carrying out their commitments to climate change and reporting their actions accurately to the Global Climate Action Portal.

This concluded my attendance at COP26. What did I learn from attending? I certainly gained a much wider understanding of the issues surrounding climate change and the courses of action which need to be taken to address these issues. By covering a fairly wide range of themes and topics at the Conference, I was able to see how all of the elements involved in climate change impact on each other thus increasing the overall impact in many cases.

I do feel in a stronger position now to encourage my family, friends and those I work with in my various roles to do what they can, however small it may seem, and to make a difference. I will certainly think twice before I use my car, buy an item of clothing I do not really need, put on an extra layer before turning the heating on and be even more vigilant with my recycling. I will also try to only purchase food produced locally or within my own country. If we can all play our part, then I feel confident that together we can make a difference and, hopefully, save our wonderful planet not only for ourselves but, more importantly, for future generations to come.