
INDONESIA NET-ZERO SUMMIT**“S.O.S. Neraka Bocor: *Climate Avengers Assemble!*”**

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**“Walking the Talk: Which Countries are Champions in
Taking Action Against Climate Change?”****Dr. Dino Patti Djalal, Moderator:**

This is gonna be one of my favorite sessions. Kita akan bicara mengenai bagaimana Indonesia harus mulai berubah secara progresif mempunyai kebijakan perubahan iklim yang dapat membawa kita pada *net-zero* target secara aman dan secara efektif. Ada 192 negara di dunia, kita mencari 3 negara yang sukses menghadapi tantangan yang sama, namun bisa melakukan dan mencapai prestasi yang besar untuk melakukan green transition, negara yang kita pilih adalah Tiongkok yaitu Climate Envoy of China H.E. Liu Zhenmin, Denmark yaitu Climate Envoy of Denmark H.E. Tomas Anker Christensen, dan Inggris yaitu Ambassador UK for Indonesia and Timor Leste H.E. Dominic Jermey.

H.E. Liu Zhenmin, Panelis:

As both China and Indonesia are developing countries, we have worked together very closely in the G77 and China in supporting global efforts of addressing climate change over the past three decades. At this session, I'd like to share with you the following observations:

First, how we see the current global climate governance. The adoption of the UNFCCC in 1992 established the concept of sustainable development for humankind and launched the global process of addressing climate change through international cooperation. But such cooperation was not very effective, to be frank, due to hesitation of some developed country parties. The 2015 Paris Agreement sets out the goal of reaching global peaking of greenhouse gas emissions as soon as possible, and decides to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gasses in the second half of this century. This is the origin of the so-called global carbon neutrality.

The Glasgow Climate Pact of 2021 urged countries to achieve net-zero emissions around this mid-century. Over the past few years, 151 countries around the world have committed to various targets of carbon neutrality, covering 92% of the world's GDP, 89% of the world's population and 88% of the world's emissions. All these commitments have demonstrated that the concept of sustainable development has taken root worldwide gradually. Green and low-carbon development has become the top trend of the times. During the COP28 held last December, the first Global Stocktake under the Paris Agreement was successfully completed, with commitments of all parties to the “transitioning away from fossil fuels in energy system”. All these have shown that we human beings are moving forward on track to reach goals set by the Paris Agreement.

However, the grim reality of the frequent occurrence of extreme weather events and the adverse impacts thereof has repeatedly sounded the alarm for us. Geopolitical conflicts and unilateral measures continue widening the deficit in global climate governance. Efforts by human beings to combat climate change are far from being sufficient, and international cooperation needs to be further strengthened. Globally, three significant challenges currently face the world: a huge funding gap; the need to enhance the maturity of low-carbon technologies; and severe impacts on international cooperation due to unilateralism.

Experience shows that addressing climate change requires all state parties to adhere to the principles and institutional arrangements established by the UNFCCC and its Paris Agreement. All parties must work together to strengthen global climate cooperation within the framework of sustainable development, and enhance climate action in accordance with principles and rules established by the UNFCCC and its Paris Agreement. For instance, the agreement on the New Collective Quantified Goals should be reached within the framework of Article 9 of the Paris Agreement at the forthcoming COP29 in November.

Let me share with you what China is doing and what China thinks about the energy transition. As the largest developing country with a big population, China knows its role in addressing global climate change. Our people are entitled to achieve their industrialization and modernization. We are also unwaveringly committed to following a path of green and low carbon development in our modernization process.

China is committed to pushing forward achievement of its goals of carbon peaking before 2030 and carbon neutrality before 2060. Since President Xi Jinping announced China's "dual carbon goals" at the 75th session of the United Nations General Assembly in 2020, China has established a "1+N" policy framework, initiating a nationwide action to achieve these goals.

China is actively developing a circular economy and is becoming one of the countries with the fastest decline in energy intensity globally. The intensity of carbon dioxide emissions continues to decrease, with the development of a circular economy contributing more than 25% to the reduction of carbon emissions. In 2023, China's output rate of major resources increased by over 60% compared to that of 2012, and the value of the resource recycling industry exceeded 3.7 trillion RMB yuan, creating jobs for over 35 million people.

China vigorously leverages market mechanisms to regulate carbon emission trading. We have established carbon markets covering the largest GHG emissions in the world. One is the National Carbon Emissions Trading Market, which has been in operation for more than two years, and the other is the National Market for the Trading of Voluntary Greenhouse Gas Emission Reduction, which started in January this year.

China is actively developing renewable energy. Through continuous innovation and persistent efforts, at the end of 2023, the installed capacity of renewable energy in China reached nearly 52%, surpassing fossil fuels energy capacity for the first time. Since the beginning of 2024,

renewable energy continued to maintain strong growth momentum, accounting for 92% of the newly installed power capacity in the first quarter of the year. Over the past months, China has formulated a policy of shifting its “energy consumption control” policy to “carbon emission control” policy, which includes both total emission control and intensity control. This policy shift will lay a good foundation for China to transition from carbon peaking to the carbon neutrality process.

China’s energy endowment is characterized by abundant coal with a lack of oil and natural gas, resulting in a high proportion of coal in China’s energy consumption, making the energy transition almost a mission impossible. However, after years of efforts, especially in the last decade, the proportion of coal consumption has already dropped to 56%. This represents a historic progress in China’s energy revolution and has led to fundamental environmental improvements. Currently, the world has entered a new era where renewable energy gradually substitutes fossil fuels. Energy transition is the correct pathway for all countries to achieve sustainable development. China’s experience in energy transition is of great value to the world.

In the process of advancing energy transition, China’s new energy products, such as new energy vehicles, lithium batteries, and photovoltaic products, have made important contributions to the global energy transition. Statistics show that China produces 70% of the world’s photovoltaic components, wind turbines, and other new energy products. Over the past decade, the average cost per kilowatt hour for global wind and solar power projects has dropped by more than 60% and 80% respectively, a significant portion of which is attributed to China’s manufacturing industry.

China will continue to work hard to promote technological innovation and production in the green and low carbon sector, providing high quality capacity and products for global efforts to address climate change.

Achieving global carbon neutrality is not only for the well-being of the present generation but also for the living environment of our future generations. At present, countries in Asia are enjoying strong economic growth, but the demand for fossil fuels remains high. Asian countries are at a critical stage of energy transition, facing multiple challenges including rising energy consumption, price hikes, financial and technological shortage, low share of renewable energy capacities and unstable supply chains. How to strike a balance between energy security and energy transition is a common challenge faced by Asian countries, especially developing countries. Here, I would like to share three suggestions:

First, upholding multilateralism. Climate change is a global issue that requires concerted cooperation among countries around the world. All countries should adhere to the UNFCCC and its Paris Agreement as the basic legal framework for international cooperation to address climate change, stick to the principle of common but differentiated responsibilities, formulate

their NDCs with maximum efforts based on their own national conditions, and make contribution to the process of global climate governance.

Second, promoting energy transition in a fair, orderly, and just manner. The outcome documents of COP28 set out the goal of “transitioning away from fossil fuels in the energy system, in a just, orderly and equitable manner”. This is the first time that global climate governance has for real touched upon the key issue of fossil fuels, marking the beginning of the “decarbonization” era for humanity. Just, orderly, equitable, and cooperation are key words for global energy transition. In my view, “orderly” refers to the fact that energy transition is a process that cannot be accomplished overnight. The transition must ensure energy security and should reflect flexibility, scientific validity, and inclusiveness. “Just” and “equitable” require consideration of the different national conditions, development stages, capabilities, and resource endowments of each country. Developed countries should provide support to developing countries to help achieve a just transition.

Third, breaking green barriers through technological cooperation. Filling the gaps in global climate governance and rebuilding trust between the Global North and Global South requires genuine international cooperation, breaking down unilateral barriers, opposing technological blockades, and resisting decoupling and supply chain disruptions. Currently, the protectionism and unilateral measures of some countries pose significant obstacles to the global low-carbon transition. A recent report from McKinsey International states that decoupling from the most widely used cleantech products in the world today would cost the global energy transition an additional US\$6 trillion, which means an 20% increase to the original energy transition bill. The international community should reject unilateralism and zero-sum thinking, contributing to global climate governance through beneficial competition and cooperation.

The climate crisis profoundly affects human existence and development. We must actively respond to climate change and achieve green, low-carbon, and sustainable development. China will continue upholding the concept of a community with a shared future for mankind and firmly advancing its dual carbon objectives. We are also willing to strengthen cooperation and communication with Asian countries through mechanisms, such as the South-South cooperation and the Green Belt and Road Initiative, with the aim of jointly making positive contributions to global climate governance and the low-carbon energy transition, and building a clean and beautiful world for all.

Dr. Dino Patti Djalal, Moderator:

Thank you very much. And by the way, I remember going to Beijing, I think two months ago, and I know that in Beijing, electric cars have green plates, and what surprised me compared to my other previous visits, was that green plate cars were everywhere in Beijing. And it's important for China to to really achieve net-zero because now China is the largest emitter in the world.

This next country is interesting, because in this country their GDP doubled, but the energy consumption remains the same. How do you do that? That's why we're inviting this particular country. This is also a country where 70-80% of the population own bicycles. If you go to this country, bicycles are everywhere. I have great pleasure to invite Climate Envoy of Denmark, Tomas Anker.

H.E. Tomas Anker Christensen, Panelist:

It has been a good reason to visit your beautiful country and to engage with our Indonesian friends. We have a very long-standing close relationship. We'll celebrate seventy 75th years of diplomatic relations next year, so that's a good reason to come and have a look at how things are going in the climate and energy space in Indonesia. But what I'm going to talk to you about now is — and what Dino sort of was introducing is more the Danish example as a small developed economy — and very remarkable, of course, intervention by Liu Zhenmin, the Chinese envoy about China's experience, but, we are sort of at the other end of the spectrum in a way from China in one way as a as a small developed economy. But at the same time, we share with China and Indonesia the aspiration of the road we have to travel to net-zero and to the full decarbonization of our economy.

But we come at it from a bit of a different starting point than you because we already peaked our emissions back in the 1990s, actually in 1997. And because of that, we are able to set absolute reduction targets for our economy that we can benchmark up against, that we can measure. And, when you can measure progress, that also makes it easier for the general public, for think tanks, scientists and everyone else to be engaged and actually follow how you're doing. It's also easier to communicate to your private sector and your investors what you intend to do, what your plan is, what your trajectory is. What I'm going to walk you through is a bit, how we have been doing that in Denmark.

In 2020, five years after the adoption of the Paris agreement and based on a new government that we had in 2019, we put into law our emission reduction target for 2030, of 70%. And that's a 70% reduction on a 1990 baseline. That is the common baseline, used by the European Union.

We don't submit our own NDC to the UN. We submit a joint NDC as the European Union, but each EU member state has to submit their contribution to the EU, and this is our contribution. So in the law, we reduce our emissions by 70%. We have a long term climate neutrality target, that is based on the 1.5°C target of the Paris Agreement. We also then have the sub target of a reduction of 50% to 54% in 2025, that is next year.

It also says in the law that we must be a leading nation in international climate cooperation and that we have a moral responsibility to lead. And, in a way, the last two bullets here, that's the marching orders, that's the definition of my job as the Danish Climate Envoy, is to work with partners around the world and find out how we can translate what we do in Denmark into learnings and cooperation that we can then transfer to other countries in the spirit of the

Paris Agreement, where developed countries are asked to transfer knowledge, transfer technology to developing countries.

What is also interesting in our experience is that in the law, we have put in this annual cycle of policy making. You know that in the Paris Agreement, the cycle of the NDC, is a five year cycle and all governments have now agreed in the Global Stocktake to submit a new NDC by February next year. And I know that my Indonesian colleagues are diligently working on preparing the next NDC for Indonesia. And at the EU level, we are also discussing what our next NDC will look like. But in Denmark, we thought that having to review our targets every five years is not enough. In order to be sure that you are on track to meet your targets, you actually need to review them every year. In our law, we have built in this this wheel of policy making where—if we start in the lower right corner—in every year in September, as a government, we have to present to the Parliament a climate plan and program for the next year where we—in that climate program—have to tell the general public all the steps we will do to reduce emissions and to meet our targets in the next annual cycle. So, in a few weeks, we will be introducing the program for what we will do in 2025.

That program is then discussed together with the national budget in Parliament during the fall, and then in December, we have a debate in Parliament where they discuss the budget and the program and they pass the budget law which takes into account the policies and the actions that we need to take as a government in the next fiscal year. In February, every year, we have an independent Danish Council on Climate Change of economists and scientists that come with their assessment of the climate program. I can tell you, every year until now, it's been a scathing criticism. They rip the program apart. They tell the minister that he's incapable of doing anything right. They tell us, the civil servants, that we are lazy, that we're not doing enough. Even my mother criticized me over dinner when she read this and said, "What are you doing? You're not doing anything." The scientists are telling you that you are incapable. It's actually pretty tough for all of us who work in the Ministry for Climate and Energy when this report comes out. In April, we then have to, through our Energy Agency, report to Parliament on the status of the implementation of the climate program from the previous year. Then, in September, we go back to Parliament with a new program for the next year based on the scathing criticism of the independent Council, on the report of the impact of the action from the last year and then we do next year's program. This cycle runs every year until 2030. It's a way to make sure that we are kept on track.

So, the trajectory that we are on basically has a focus on the 70% greenhouse gas reduction in 2030—that's in the law. Under that is the target of being 100% with green electricity in our electricity system. We are currently at 70% to 80% on an average. Some days, it's less if there's less wind. Other days, it's 100%. You will find many energy system operators in countries that have a lot of coal in their energy system who will tell you that this cannot be done. They think that even if you reach 10% of variable renewable energies in your system, the system will break down. That is simply not true. It is absolutely possible to operate an energy system with 100% energy security and 100% variable energy in the system. It's all a

question about how you manage the system, if you have a grid that is efficient, if you have a digital support system, the software to operate it.

In 2030, we our target is to be 55% in total energy consumption, but we will overshoot that target because also in Denmark the electrification of transport electric vehicles is taking off and more than half the cars sold now are either electric or hybrid and we are by far overshooting that target because we thought it would take much longer to get that electrification underway.

We have to be climate neutral in 2045. We have moved that forward from 2050. It is the aim of the government for us to be -10 in 2050. We are trying to convince our partners in the European Union that we as an EU should be going negative as well. In order to stay on track for 1.5°C, we believe that there are some large emitters that actually need to be negative because otherwise we as a planet will overshoot the 1.5°C. Currently, we are on a trajectory to somewhere between 2.5°C and 3°C. Hopefully, by the time of the next NDCs next year, the global trajectory will come more towards 1.5°C but we probably will have to develop technologies that will allow us to be negative as we go more towards 2050.

This is just to show you in terms of planning that in our annual process what this means The Climate Status and Projection (KF), that's Climate Program 2021, 2022, 2023, and 2024. Every year we advance the reduction impact of what's in the program in order to arrive at where we need to be in 2024 which is the 55% reduction in 2025. I know this is a bit confusing, but this is more to show you the planning tools that we apply. And as part of this overall planning, the implementation in Parliament has been to conclude more than 75 different political agreements and regulatory agreements on everything from energy to Power-to-X to carbon capture and storage, waste, buildings, I mean, all sectors of the economy.

And the last agreement that we achieved in May this year was to start reducing emissions from agriculture and forestry and we are the first country in the world now to introduce a CO₂ tax on livestock—cows, pigs, and other animals. As you know, they have large emissions and we need to put a price on those emissions in order to bring them down and we have started to collect methane from livestock and use that as a biogas. Actually, you can put a value on that and use it in industry. And we are attempting to replace natural gas, for example, in cement factories with biogas from agriculture. Now this is just an illustration going a bit back of the kind of agreements that we have concluded—waste, transport, agriculture—to show you that it takes very detailed planning but also implementation in Parliament and through the legislative process to put in place the frameworks that will then manage the economy. And basically, we don't implement ourselves as a government, but we put in place the frameworks for society and the private sector to operate in a way that means that we will achieve our targets.

That also means partnering with the Danish businesses and Danish science community for them to be ahead of the curve. This is just to illustrate that in addition to what we do as a government, we have teamed up with the private sector who self-organized into the fourteen most important sectors for the green transition and that's everything, from manufacturing, IT waste, aviation, shipping, construction, commerce, defense, energy. Each sector basically made their own plan for how to achieve the 70% reduction, what they can contribute under our current policies, what extra regulation they need, or what they need us to do at the European or global level. Danish businesses don't think that this is a punishment. They think that this gives them a competitive advantage in the global arena because they will be the most efficient companies with the highest level of technology, whatever sector they're in, whether it's Maersk as a shipping company, LEGO in plastics, Vestas in building windmills. They will be ahead of the curve compared to their global competitors and will be able to sell the highest quality products all over the world, including in Indonesia, and you can be sure that they live up to the highest standards that we have set nationally.

This is just an illustration from the climate program because we also try to be technology neutral. So it's not that we as a government have said we now will do it this exact way. Every year, in the climate program, we come up with various scenarios of the emissions reductions impact—whether it's transport, CCS, going into waste, or looking at energy—and we look at the cost and the CO₂ reduction impact of doing it in different scenarios, so that our policy makers can decide on the pathway they want to take. Of course, every year we get a year closer to 2030 and if you don't have the technologies in place, it becomes more and more costly the further you come down the road, but at least this has helped us sort of course correct and give guidance to the policy making and the price setting.

To sum up, this is what we do nationally, internationally and then to finish here, we try then to merge our role as a diplomacy with government-to-government cooperation. We have a strong energy cooperation partnership with Indonesia, but we also then bring in technology investors, the private sector, to help build the investments that support the technology and the diplomacy. And through this kind of operating model, we have been asked to lead in the COP negotiations on mitigation. We did that with the UK in Glasgow, Egypt in Sharm el Sheikh. Last year, the Global Stocktake set that target that my Chinese colleague talked about—transitioning away from fossil fuels—we facilitated that Agreement. We are asked to do that because of the trust we are building by operating this way. We have also put in place a number of strategic alliances to go beyond oil and gas. We have decided to end oil and gas extraction in Denmark. When we did that, we were the largest producer of oil and gas in the European Union, but we are building wind farms instead now where we used to have oil and gas extraction. We are also putting in place a global alliance to build offshore wind, and would love Indonesia to become a member. We are now also building an alliance to look at how we can scale negative emissions. Our prime minister is very active in this space together with the line ministers. Indeed, we are also working with Indonesia in the Just Energy Transition Partnership (JETP), trying to combine the energy advisory work with the investments and the private sector engagement. In that way, we are trying to take what we do

nationally and then learn from it and work with partners like Indonesia in the global space to help all of us reach that 1.5°C target, that trajectory, so that we don't overshoot it too much.

Dr. Dino Patti Djalal, Moderator:

Excellent. Thank you very much, Tomas. And I think if you listen to Tomas' presentation, remember this, you look at the numbers—70% reduction by 2030. That's very ambitious. If you talk about the climate debate and people say, “Look, the numbers are not realistic,” you remember the presentation that you just heard. The numbers can be achieved. The difference is what? You have to have policies. It's not enough to just say you want to reach net-zero. It could only be achieved by bold policies. The question is, do we have bold policies enough or not? Another point that should be noted is remember, Denmark's climate targets are legally-binding. It means, if the government doesn't commit to meet those climate targets, they are violating the law.

H.E. Tomas Anker Christensen, Panelist:

Thank you Pak Dino, maybe just as an anecdote. When we agreed on the 70% target that came out of a political process, where the Prime Minister was forming her government and the parties that were going to support her government they put it as a condition that we would have the 70% target. Our scientists at that time said, “We cannot do that, it is unachievable, we know how to get to 60%, 70% is impossible”. But the parties that were supporting the Prime Minister said, we don't care, we need for us to be trustworthy, we need to be on that 70% trajectory. “You go and figure it out, Prime Minister. If you want to have our support, that's where you need to be and you need to put it into law” as Pak Dino said. So, when we started it out in 2020, we actually didn't know how to get there and that's why the independent council that every year in February does the analysis of our policies. The first three years they were basically saying, you have no idea what you're doing, you have no plan, you have no policy, you are swimming *'blind'* and my mother was listening more to those people than she was listening to me. But now in the last report with those four scenarios that we have achieved, we have been working so hard on it with our scientists and our investors that now we actually know how to get to the 70%. In fact our reports tell us that we can probably get closer to 80%, if we really put our shoulder to the wheel and at an affordable cost. By the way, that also helps Danish industry to be ahead of the curve, so as a society we're actually gaining by being more ambitious.

Dr. Dino Patti Djalal, Moderator:

Now, there's another country which has done quite a phenomenal job in terms of climate progress. They have reduced emission by 25% since 2010, which is the fastest emission reduction of any G20 countries. They are the first country to phase out coal from their national energy mix, and they invested US\$52 billion – Rp 7 trillion, and it has created hundreds and thousands of green jobs. This is also another country that makes climate emissions reduction targets legally-binding. I take great pleasure to invite my good friend, Ambassador Dominic Jermy to tell us the British story.

H.E. Dominic Jerney, Panelist:

In the United Kingdom, we've been thinking about climate change and nature for hundreds of years. About 60 years after William Shakespeare, in the 17th century, a man called John Evelyn. Now this guy, he's a scientist. He was one of the founders of our Royal Academy, our Special Science Academy, and he wrote a treatise, like a textbook, on air pollution caused by burning coal in London. Air pollution caused by burning coal sounds familiar to anybody? That was 350 years ago. What he did was he didn't only set out what the problem was, but he dedicated his book to King Charles II, the ruler, because he recognized that if you want to tackle climate pollution, you need to have political power behind you. He also came up with some of the solutions. They include, and I quote, "By reason of the frequent plantations of trees and nurseries for ornament, profit, and security."

Today, we'd call that a nature-based solution to climate change. Fast forward from the 17th century to the 21st century, from King Charles II to King Charles III, last year at COP28 in Dubai. His message to global leaders was that the hope of the world rests on the decisions you must take. Now a lot has happened in the 360 years since those two King Charles's. Amongst other things, in the UK, we've experienced an industrial revolution that was originally driven by fossil fuels. That gave us great wealth and power, but it also had a massively negative impact on our environment, on our nature, and frankly, on our traditional ways of life. That peaked—that came to its worst point—in 1952. There was something called the 'great smog'. This was air pollution in London that was so bad, 8,000 people died in one week. I mean just imagine that next time you're getting fed up with air pollution in Jakarta. In 1952, 8,000 people died in London within one week because of air pollution. That kicked off—for the UK—our long and slow and painful transition away from fossil-based fuels.

How did we do that? Well, I remember as a kid growing up in the UK in the 1970s and 1980s, I remember that there were strikes by coal miners, a bitter dispute in 1984, and there were protests in the streets because people felt that the government had forgotten the just part about just energy transition, a critical element. And also there were even power cuts. So this was really hard, but we got through that, and we came to a decision that as a country we were going to change our politics. Now one of our first prime ministers was the one to think about climate change, one of the first global leaders to think about climate change, was actually Margaret Thatcher who was, for all her many faults, the person I remember associated with those miners strikes in 1984. In the prime ministership of Gordon Brown, he introduced the legally binding Climate Change Act that Pak Dino has just mentioned. Prime Minister Theresa May introduced a legally binding commitment to net-zero by 2050. Prime Minister Boris Johnson hosted COP26. Now, this was the first global summit on climate change since the Rio Earth Summit that really brought nature back into climate negotiations—absolutely critical to solve the whole climate problem. The new government of Sir Keir Starmer—our prime minister who came in last month—has committed to the UK to zero carbon electricity by 2030. We're making decarbonizing our economy an absolute driver for how we think politically.

We've been at the forefront of climate and nature science as the UK since the 19th century. You remember Charles Darwin? Good. He was one of the first thinkers about nature. He transformed our ideas about nature and he did that by observing Galápagos finches. But while he was doing that, at the same time here in Indonesia, Alfred Russel Wallace was looking at endemic Indonesian species across your archipelago. And so the science that we have today has moved on since then but we stand, ladies and gentlemen, on the shoulders of giants. But it's not just scientists you need. You've got to get the politics right, got to get the science right, but you also need economists involved in decarbonizing your economy. And there are two outstanding British economists I want to mention. One is Lord Stern and the other is Partha Dasgupta. And they produced two reports on the economics of biodiversity and the economics of climate change. And these two reports brought business into the whole climate and nature conversation almost for the first time and that enables us to bring private capital and private sector solutions into tackling climate change.

They also put a value on the natural world and that is essential because now we can actually understand the cost of nature and climate that we've been exploiting as though they are a free good. So with the science right, with the politics right, the policies should follow and the policies need to be based on evidence, data, and science. In the UK, our science based policies mean our emissions have nearly halved. In fact, they are already half of our baseline in the 1990s and they are on the way down. So get this, last year in 2023, our emissions were lower than they were at the very height of the pandemic in 2020 when our economy had been shut down for six months of the year. And indeed we've kept on course—despite the massive impact to European fuel supply caused by Russia's brutal invasion of Ukraine—and in fact, as a result of that, Europe has managed to end its addiction to fossil fuels from Russia. So how are we doing this in the UK?

Number one, by leaving coal behind and embracing renewable energy. In practice, for us, decarbonization means hundreds and thousands of green jobs as Pak Dino mentioned earlier. It means a much better air quality in the UK. Part of that is this year, we are closing our final coal fired power station. No more coal fired power stations in the United Kingdom after this year. It also means economic growth which is critical for governments to deliver to their people. In the UK, our economy has grown by 80% since our 1990 baseline.

Number two, we're doing this because we have a system for action that doesn't allow politicians to meddle with it and that is critical. We have an independent committee of scientists and experts, called the Climate Change Committee, and they set carbon budgets for the whole economy. That committee, their advice, and this way of approaching carbon budgets have survived 5 general elections in the UK and it survived 7 prime ministers.

Number three, we are embracing nature and nature provides some of the cheapest and the best ways of tackling climate change as John Evelyn understood way back in the 17th century. In Indonesia, you do this with mangrove replanting. You preserve your forest, you

replant forests, you have some sustainable approaches to agriculture, like Bali's Subak system. Well, in the UK, we've committed to a 30/30 rule protecting 30% of our land and 30% of our ocean by 2030 and restoring those natural ecosystems.

You get the policies right, the politics right, the science right, and then you've got to get people to care. Finally, I'd like to close by mentioning an outstanding nature and climate change communicator, Jane Goodall and David Attenborough. Well, when I was a kid they were the people who made me care about nature, about biodiversity, about climate change. Now, people in the UK, they vote for climate action because of some outstanding communicators who've really made us care.

Before I finish, you might wonder what the map is with all these pins on. These are projects, programs that the UK and Indonesia are doing that are about biodiversity restoration. They're about tackling climate change. They're about sustainable infrastructure and they are about renewable energy. Those are ones that we're doing together in your country. So if there is one message I would like all of you to take from my talk today, it is that people in the UK really care about restoring biodiversity and about taking action on climate change and that we want to do that in partnership with you. So please take action whatever you do. I would love it if you came to my country to the UK to study in this space.

Dr. Dino Patti Djalal, Moderator:

Thank you, Dominic. That was very inspiring. I would like to invite Liu Zhenmin, and Tomas Anker on stage. I want to invite the students to start going up, to ask questions here.

But, you know, before we turn the questions to the audience, I wanna ask an important question about the political will. There was consistency, obviously, in the political will towards climate policies, and in China also, there is strong political will and also in the UK. But, any of you want to comment on how that political will come about? Because, I think in any country without that political will, then, climate policy becomes *wishy-washy*, right? And as I said earlier, in many countries around the world, once you change political leaders, then, the climate policy becomes undone on some occasions. So does anyone want to comment on this political world issue?

H.E. Tomas Anker Christensen, Panelist:

In my country, we had an election in 2019 that sort of changed the political landscape. And that election, much to the surprise of the politicians, became a climate election driven by students, but also by their grandparents. Not one particular political party—it was across the political spectrum—from the left to the right. The Prime Minister needed to agree to a 70% target even though the sign of the policy makers—her officials—said that it couldn't be done. It was very much driven by popular will, by popular demand, but also because the private sector was telling the government, we need you to be more ambitious. In a way, you had a marriage of students, grandparents, with the private sector who were pushing the government to be more ambitious. That sort of public political will articulated by the population and the

business has basically stayed ever since. And now it's become, as you say, Pak Dino, it's become sort of a staple of Danish politics, and it is a broad political agreement from the far left to the far right. The law, when it was adopted, was adopted with a 95% of the votes in Parliament. I mean, it stands until 2030, and we're going to update it next year when we—at the European level—will adopt our new NDC that will go until 2035. The proposal on the table is for a 90% reduction in 2040, which we nationally strongly support. And, when that is adopted at EU level, we will then have to reflect that in our own law and update our law. There's no question about that. We actually hope that the EU will be more ambitious than the 90%.

H.E. Liu Zhenmin, Panelist:

I think, in my experience, the global pressure has been increasingly focused on addressing climate change, my assessment will be both for domestic and for international policy. We need both a stable and strong leadership. For China, I think, why we have been so effective over the past years in responding to climate change, we have a very strong and firm leadership. Leadership listens to the people. Internationally, we're also expecting to have strong global leadership. That means the United Nations, also with the UNFCCC framework, could get stronger global actions.

It would be over 30 years since the entry into force of the Convention of Climate Change. In some parties, because of instability and change of leadership, sometimes in some administrations, they state they are strong in supporting global climate cooperation, for some administrations, they withdrew from the global process.

I think that way, we're expecting each country—that their leadership, whatever party—really should listen to the people. Let's not just decide their climate policy individually. They should listen to the people and listen to other countries. Internationally, I think we need to really continue to improve trust between the North and South, really to build up multilateralism.

Dr. Dino Patti Djalal, Moderator:

Dominic, I have a question for you. There's a war in Europe and geopolitical tension is very high. I think some 20 NATO countries have up their defense budget to 2% of their GDP and more will follow suit. Are you not worried that more resources will go towards military purposes than they would go for climate action?

H.E. Dominic Jerney, Panelist:

We have to be very careful to make sure that the investment that we make reflects the long term priorities, not just the priorities of this year and next year. I mentioned that Russia's brutal invasion of Ukraine had in fact caused the European Union to cut its dependency on Russia's fossil fuels and what that is an example of is the acceleration of the move towards green energy because if you use green energy, generate it yourself, you are not dependent on pipelines, you have much better energy security. There is a way of thinking about geopolitical

tension that can actually help drive a switch to a green economy. It is clearly a concern if people are directing resources away from green energy transition.

The way I look at how we approach your earlier question, in the UK, first of all, we make sure that what we do is based on science and data as I mentioned in my presentation. It isn't based on party politics. So, there is consensus whether you are from the left or the right, whatever party, this is science and data and we're gonna stick with that. It is also something that people care passionately about and that is what they vote for. So I think regardless of the geopolitical tensions, regardless of other things going on, people are going to be passionately holding the UK government to account, bureaucrats like me to account, for delivering on climate change. I was at COP26, not as an official. I was out there with an NGO and I was lobbying the government. I was out there in the streets shouting and chanting and there were hundreds and thousands of people there because they care and they're determined not to make the same mistakes that my generation made in the past.

Dr. Dino Patti Djalal, Moderator:

Thank you. So we're gonna take some questions from the audience.

Q&A Session

Lecturer at *Universitas Indonesia Maju*, Participant 1:

My campus tries to convert plastic bottles to tumbler water bottles for every student. And, the United Kingdom is the home to a growing movement of green campuses where universities are actively working to reduce their carbon footprint and environmental impact. So can you explain to us or motivate us to be consistent or how we can commit to a greener future?

Widi, Participant 2 :

My question is should we reconsider the economic growth, not only based on the GDP and not using the GDP growth as a sole measure to the economy and prosperity? I believe it's referring to Kate Raworth's doughnut economy model. What is your view? What kind of measure can we put in—in ESG measures and anything like that—to measure our economic growth?

Participant 3:

As we all know, China is one of the biggest producers and exporters of electric vehicles, especially in Indonesia. I'm just curious. Is there any diplomatic effort or cooperation between China and Indonesia to address climate change? Is there any way possible to create a new diplomatic effort to address this issue?

Tiar, Participant 4:

Foreign policy starts at home, and that's how people from the grassroots are able to voice their concerns and let policymakers do it, whether it's domestically or internationally. However, there will always be one case each year, at least in Indonesia or any other parts of

the world, that climate activists are being criminalized for voicing out their concerns. And therefore, has this happened in any part of your country, and how would you view this certain challenge?

Participant 5:

Achieving NDCs or ensuring a just transition. How can they be effectively integrated? I think it is possible for all the speakers to share their thoughts in regard to this question, and I guess that covers my curiosity.

Dwi, Huan Private School, Participant 6:

Mister Liu, how does China reconcile its rapid expansion to the coal power plants and continue real reliance on fossil fuels with its commitment and to lead in clean energy development on carbon neutrality?

H.E. Dominic Jermei, Panelist:

All of you, please look up the #OneLess campaign. You'll find out about a program of people engagement that we did in the UK about getting people to stop using single-use plastic bottles. This led to a transformation where businesses were stopping to have these in the supply chains, the government stopped using single-use plastic bottles, and people felt that it was really wrong to use them and so they recycled bottles. The Mayor of London put out lots of water refilling points so people could get free water from the street. Community engagement for that was absolutely essential to change people's behaviors. Climate change action is all about changing people's behaviors. You talked about economic growth and other ways of thinking about it than GDP—a really great question because GDP is such a narrow way of thinking about human well-being and nature-based accounting. Some of the work that Partha Dasgupta did on the Economics of Biodiversity—take a look at that report because that shows a different way of thinking about how countries and how companies can do their accounts that values things that we really care about, like nature and climate change.

I would just mention that just transition and green transition, you are absolutely right. They've got to go hand in hand. They've got to be completely integrated because you have to bring people with you and that's why the transition to the green economy, if you can make that about the creation of jobs, if you can make that about innovation, if you can make that about people's lives becoming better because they've moved away from—I don't know—dangerous jobs mining coal to something that enables them to have a dignified existence and income that lets their children go to school, and do so safe in the knowledge that their parents are going to survive the day in a less dangerous environment, then you've created something that is well worth having for your society. The hundreds and thousands of green transition jobs that we've seen in the United Kingdom do exactly that. Thank you.

H.E. Tomas Anker Christensen, Panelist:

Thank you for all the students' extremely good questions. I would say, keep up that engagement and I hope that you are making those comments everywhere you go and also to

be active in your own community, and to push this agenda because we need your voice locally, but also globally. There was a question about whether we have criminalized climate activists, not to my knowledge. In my country, we try to include everyone in the democratic dialogue and people who have a different opinion. We invite them inside for a cup of coffee, we talk to them, and we try to understand where they come from. Then, if there are enough people who have that opinion, we also try to adjust our position and our policies.

We hosted a Climate Ministerial Meeting a few years ago where there were climate demonstrators tying themselves to the lampposts and gluing themselves to the street outside. We had Foreign Ministers in the building, and actually, some of the ministers from the Global South, including from the Arab world—who maybe were not used to engaging with these types of activists—went out into the street and invited our activists inside for a conversation about climate change and climate action. That became a really positive dialogue. I would hope that you could also try to go down that pathway here.

There was a question about how to measure GDP. That is a really complicated question that economists haven't reached the end of, as you know, but one thing that I think you should do and that we are doing is putting a price on externalities. The most rational way to reduce your emissions is by putting a price on carbon, and in that sense, putting a price on the polluter, and measuring that. As I said in my presentation, we have now introduced a price on emissions from livestock and agriculture, maybe as the first country, which was politically really complicated. We had a dialogue with the farmers' unions and the agricultural industry, and everybody realized that if the nature part of our economy didn't contribute, we could never get to net-zero. It's about 30% of our economy. If they don't play a part, it's simply not doable. Actually, it is 30% of the global economy as well, so we have to work together globally on how to bring down emissions and count nature into the climate equation. Right now, everything is focused on the transition away from fossil fuels, but the nature-based solutions have to be tackled as well. Finally, the transition, I couldn't agree more with Dominic. Of course, it is, in many countries, presented as a dilemma that you cannot achieve economic growth without it being fossil based. But the situation is also this—if we don't collectively stay roughly in the 1.5°C space, if temperatures really rise, you will see the ocean rising much faster, violent storms and hurricanes becoming more frequent.

I spoke to my Indonesian colleague the other day, and she said “last year in Indonesia, you had more than 5400 climate related weather incidents and that is going up.” That is dramatic and we know that the ocean rise is going faster around the equator in your shores than in other parts of the world. But, I think there's a new report due out on Tuesday from the UN that will show that ocean rise is going much faster than expected. This UN Secretary General will present in the Pacific Summit in Tonga and in that sense the two have to be combined working on bringing down the emission, the just transition, and the job creation.

That's also why we are engaged in Indonesia in supporting your just energy transition and working with the government and the industry to try to see how we can support the transition

away from coal and into renewable energy. Hopefully, we can work together on accelerating that transition in the years to come.

H.E. Liu Zhenmin, Panelist:

Thank you to the colleagues for the six good questions. First, I fully agree, for all countries, for the world, we must go beyond GDP for measurement. When I was the Under-Secretary-General for Economic and Social Affairs in the UN, we also discussed the view in the United Nations on how to help member states to go beyond the measurement of the GDP. But we cannot avoid measurement of GDP. That's the basis. Over the past few years, China has had a combination of four policies: reducing and controlling the pollution; reducing emissions; expanding green coverage; and advancing growth. If any government could combine four areas of policies into an integrated policy, you are going to achieve a lot. So, this is one of the experiences.

China, India, and Indonesia are Asian developing countries. Some of China's experience would be good for Indonesia. For example, I think after seven years, after coming back to Jakarta, I found that the air pollution in Jakarta was at the same as it was seven years ago. I don't know if it's getting better or getting worse, but there's no big change. How to improve that? It's good for the Indonesian and the municipal government to use this opportunity for any transition. You use more green, electric cars, you encourage people to use more electric motorcycles. I think from China's experience, immediately, after a few months and years, the air quality changed. That would be good for cities. So, please combine the control of pollution with reducing emissions together in the cities. You are going to achieve good results, but this should have the support of the people, including young people. You will not be so excited to ride the motor or electric motorcycle, but for the sake of the better air quality for the city, I think you are going to achieve a lot. So we need to mobilize people's support.

Second, I think the core third issue that I want to really assure you is that China and Indonesia have greater potential to collaborate in the coming decades. We are close neighbors. We have a similar situation for energy transition. I think we can collaborate, and expand our renewable energy capacity, you know, spending our cooperation in the manufacturing of many of the renewable energy products. There's already some good project cooperation. I think China can really share with Indonesia a lot and help Indonesia start a real energy transition process. Fourth, I want to say that I admire Indonesia's government's decision for this net-zero target around 2050, but also advised and suggested that Indonesia really want to start a process that would be what your national plan for achieving this, net-zero targets. China's situation as a developing country is different from our European friends. They already achieved carbon peaking many years ago. Even for European Union members, including the UK, the former European Union member, they already achieved carbon peaking in the 1990s.

For China, we are going to achieve carbon peaking before 2030. I think, as a developing country, a two-step approach is much more important. But to convince the government and

enterprises, that we have to achieve carbon peak first, then we should start our process of carbon neutrality. Since China started this process a decade ago, we were reducing our coal consumption and the coal production dramatically. That's why, as I mentioned in my remarks, traditionally we have a high percentage of coal share in our energy consumption, over 80%. Now we're reduced to 56%. I think gradually we should reduce our coal component in energy to a very small percentage.