Summary of Discussion
The conference was opened by Barbara Hendricks, Minister of the Environment, Nature, Conservation, Building and Nuclear Safety, Germany, followed by introductory remarks by Angel Gurría, OECD Secretary-General. Governments around the world are at a crossroads, as they seek to reignite growth in a world of slowing productivity growth and increasing inequality, and address the threat of climate change. There is a window of opportunity to look for policies and investments that can simultaneously revive growth, protect climate and build a sustainable and resilient future. The German Government’s efforts to put the issue of climate squarely on the G20 agenda and make the link between growth and climate are vital in this context.

An integrated approach to growth and climate – one that sees governments achieve strong and inclusive economic growth in the short and long term, while reorienting economies towards low-emissions, resilient development pathways – is at the heart of the OECD’s Investing in Climate, Investing in Growth report. The report shows that climate-compatible policy packages to get to below 2°C can increase long-run output by up to 2.8% on average across the G20 by 2050 relative to the baseline. If the positive impacts of avoiding climate damage, such as from increased flooding, storms and extreme weather events, are also taken into account, the net effect on output rises to nearly 5% by 2050. Acting now can also be good for growth in the near-term: the report’s modelling work indicates a net growth effect of around 1% for G20 economies in 2021. Conversely, if governments delay and do nothing now, action later on would be more costly, leading to average losses of 2% of GDP, relative to acting now. Waiting means that more stringent climate policies will have to be introduced more urgently in due course, stranding more assets. The room for manoeuvre is tight, particularly when it comes to decisions on long-lived infrastructure over the next decade.

The conference focused on three main areas to help governments achieve a decisive transition: how to scale up good policies and practices to achieve climate goals while simultaneously spurring economic growth, competitiveness and well-being; how to manage political challenges in implementing ambitious policy reform; and how to mobilise the investment required for the transition.
PANEL 1: POLICIES FOR A DECISIVE TRANSITION FOR CLIMATE AND GROWTH

Simon Upton, Director, OECD Environment Directorate, opened and moderated Panel 1, focusing on the action governments need to take to benefit from opportunities that arise from a combined agenda for climate and growth. Six panel members provided insights on key priority areas for governments seeking to accelerate the transition: Catherine McKenna, Minister of Environment and Climate Change, Canada; Xie Zhenhua, Special Representative for Climate Change Affairs, People’s Republic of China; Jochen Flasbarth, State Secretary, German Federal Ministry for the Environment, Nature Conservation, Buildings and Nuclear Safety (BMUB), Germany; Laurence Tubiana, Chief Executive Officer of the European Climate Foundation and Professor, Institut d’études politiques de Paris; Christian Kastrop, Director, Policy Studies Branch, OECD Economics Department; and Sharan Burrow, General Secretary, International Trade Union Confederation.

A number of themes emerged from the discussion. First, structural reforms that support climate action are critical for both growth and resilience. For example, reducing barriers to innovation, trade and investment are key to enabling the development and penetration of low-carbon technology and infrastructure, along with increased R&D to help drive growth in productivity. Improving access to education and skills is also important to support a workforce refocusing in lower-carbon industries, along with measures to facilitate the exit of fossil-intensive firms and the entry of climate-friendly innovators. It was highlighted that getting this message across to economics and finance ministries is crucial, and that the report is having a useful impact in that regard.

Second, there is a need to boost investment in modern, smart and clean infrastructure. Infrastructure generally has suffered from chronic underinvestment for decades. Around USD 6.3 trillion a year of investment in infrastructure is required on average between 2016 and 2030 to meet development needs globally. Making these investments
climate compatible would only cost an additional USD 0.6 trillion a year over the same period and could be offset by fuel savings of up to USD 1.7 trillion per year through 2030. Low interest rates have increased fiscal space in many countries, and governments should capitalise on that. Where there is less fiscal space, there are opportunities to optimise the tax and spending mix to align stronger economic growth with low-emission, resilient development, and to attract private sector investment.

Third, finance will be a key factor. The whole financial system needs to be geared for the transition, through financial institutions tuned towards climate-friendly investment, mechanisms to mitigate risk and mobilise capital from both private sources, and a correct valuation of climate-related risk. Development banks also have a role to play – not only to use their balance sheets to amplify available resources, but also to develop green finance in partner countries, including through policy and capacity building support.

Fourth, countries will need push forward with their climate policies: notably to broaden carbon pricing and eliminate inefficient fossil-fuel subsidies, to create clear signals for non-state actors across the economy and help drive the transition away from incumbent fossil technologies. This may prove more challenging than developing new low-emissions industries. Making greater use of public procurement to invest in low-emission infrastructure can also trigger industrial and business model innovation through the creation of lead markets. R&D is particularly important for those industrial sectors in which no clear decarbonisation options are yet available, and to help develop solutions to help drive energy efficiency in the growing global building stock.

Panel 1 discussants from top to bottom: Laurence Tubiana, Chief Executive Officer of the European Climate Foundation and Professor, Institut d'études politiques de Paris; Christian Kastrop, Director, Policy Studies Branch, OECD Economics Department; Sharan Burrow, General Secretary, International Trade Union Confederation; and Jochen Flasbarth, State Secretary, German Federal Ministry for the Environment, Nature Conservation, Buildings and Nuclear Safety (BMUB), Germany.
Is there a case for a focus on innovation for “maximum benefit” pathways, as opposed to least-cost pathways? Technology transfer will also need to play a role.

Finally, proactive policies to facilitate a just transition for affected businesses and households, particularly in vulnerable regions and communities, will also be required. The transition will not succeed unless it is inclusive. It was stressed that achieving a “just transition” is not just about protecting vulnerable workers in declining carbon-intensive industries; it is also about guiding the coming industrial transformation, and making communicating about the new employment opportunities emerging from the transition.

**PANEL 2: A WELL-MANAGED TRANSITION MUST BE SOCIALLY INCLUSIVE AND GOOD FOR BUSINESS**

This session explored the key factors for a successful transition to a low-carbon economy, recognising that to be politically viable and must be beneficial to the workforce and economically attractive for business. This means identifying most exposed activities, labour forces, communities and regions, assessing local capabilities, and developing appropriate response measures such as retraining and reskilling. Early planning for the transition is essential if societies are to avoid stranded assets in fossil-fuel-intensive industries, and to avoid stranded communities alongside them.

Moderated by **Karsten Sach**, Director General for Climate and International Cooperation, BMUB, Germany, Panel 2 comprised **Paddy Padmanathan**, Chief Executive Officer and President, ACWA Power; **Christian Schubert**, BASF Vice President and representative of the B20 Energy, Climate & Resource Efficiency Taskforce; **Samantha Smith**, Director, Just Transition Centre; **Wael Hmaidan**, Executive Director of Climate Action Network International; and **Richard Baron**, Principal Advisor, OECD Environment Directorate.
One key point of discussion was the political forces shaping government actions related to climate change, including “carbon entanglement” where governments rely heavily on fossil-fuel royalties and tax revenues, as well as the implications of climate policy for households, communities and businesses.

Several specific examples were shared where low-carbon investments have been both profitable and supportive of local community engagement, including solar farms built through competitive tender process in Morocco. Looking more to managing expectations about employment impacts, the City of Oslo’s plan to reduce emissions by 90% by 2030 was highlighted. Despite the ambition of the plan, it faced no public resistance, because it was developed through a social dialogue with stakeholders, preempting possible future conflicts. A critical part of the transition is the planning stage.

It was pointed out that while governments and rate-payers have funded development of renewable energy with considerable success, the technological options for decarbonisation of energy-intensive industry are much less apparent. Citing the importance of the industrial sector as an insurance policy against disruptive developments, such as in Germany during the global financial crisis, one participant stressed the importance of maintaining a prosperous industry sector. The role of the B20 working group on energy and climate was also raised, in particular its recommendations to governments on creating a level playing field that would be ‘technology agnostic’, allowing for emission reduction in a most cost-effective way.

It was highlighted that in general, politically speaking, there is currently a need to communicate a more positive and credible vision of the transition to civil society and the public, with the German ‘energiewende’...
being cited as a good example. Positive commitments such as targeting 100% renewable energy or providing clean jobs for all can be effective at getting people on board. One needs to think about two components of the civil society - civic actors and civil space.

The panel discussion reached the following conclusions on the challenges faced by countries in their efforts to promote transition:

- **Fossil-fuel dependence**: There is a need to diversify the fossil-fuel dependent economies and free up resources through structural reforms. For instance, In order to reform its economic model Saudi Arabia took a decision that by 2030, the economy will no longer depend on oil revenues. Any oil revenues received will be set aside, and not directly used to support the economy.

- **Lack of opportunities**: It is important to create domestic employment and education opportunities for the transition. For instance, workers in the affected sectors are well aware of the need to re-orient the economy. However, they often lack alternative opportunities, and therefore may oppose the change. Furthermore, many students are still graduating in fields such as petroleum studies, potentially locking in skills that might lack demand in the future.

- **Scaled-up innovation effort**: There is a vital need to accelerate innovation efforts. While the energy needs of the industry may be met through clean renewable energy sources, process emissions, for instance in the chemical industry, need to be substituted through further scaled-up innovation. Public procurement can play an important role here.

**Panel 3: Delivering a Decisive Transition Requires a Supportive Investment Environment and the Right Infrastructure**

Panel 3 explored the policy mix required to scale up investment in low-carbon and climate-resilient infrastructure and create a financial system oriented towards mobilising the necessary level of investment. The discussion highlighted the urgency of action, as in the next 15 years the global economy will install as much infrastructure as it has accumulated to date. Making the wrong sort of infrastructure choices now will lock-in high carbon pathways, potentially putting the Paris Agreement objectives out of reach and leading to more stranded assets in the future.
The panel, moderated by Helen Mountford, Director of Economics, World Resources Institute, and Programme Director, The New Climate Economy, comprised: Jennifer Morgan, Executive Director, Greenpeace International; Amal-Lee Amin, Chief of Climate Change and Sustainability Division, Inter-American Development Bank (IDB); Mihir Swarup Sharma, Senior Fellow and Head, Economy and Growth Programme of the Observer Research Foundation; Ottmar Edenhofer, Director Mercator Research Institute on Global Commons and Climate Change (MCC), Co-Chair T20 Task Force Climate Policy and Finance; and Haje Schütte, Head, Statistics and Development Finance Division, OECD Development Co-operation Directorate.

A range of policy measures are required to trigger the investment needed for low-emission and resilient economic growth: structural pro-growth reforms, specific climate policies and an investment environment aligned with climate objectives. If investment conditions are not conducive to low-carbon investments, even the best-designed climate policy is unlikely to be effective. Finance will be key: capital must be mobilised from both public and private sources, supported by a variety of financial
instruments and financial institutions tuned for low-emission, climate-resilient infrastructure. The financial system will need to take greater steps to correctly value and incorporate climate-related risks. Further, governments need to address barriers to private sector involvement in infrastructure financing generally, in addition to setting the conditions to favour low-carbon investments.

It was highlighted that to overcome several challenges that impede the transition, a holistic approach is needed that would address issues related to capacity, finance, scalability and replicability of solutions, and incumbency. However, it was acknowledged that some challenges might be more common to emerging economies than developed countries. As developing countries suffer from the lack of finance for any type of infrastructure, not limited to low-carbon, there is a need to channel capital from the developed world. Developing countries tend to face the added hurdle of increased financing costs, due to perceived policy and country risk that comes on top of the technology risk associated with newer technologies and infrastructure types.

In this context, development banks play an important role in unlocking and mobilising private finance, integrating climate and environment into the wider development agenda. However, while several Multilateral Development Banks (MDBs) have set ambitious climate targets, only a third of their infrastructure portfolios target climate-related objectives. An example was shared of IDB work on the low-carbon transition, focused on four key areas: strengthening upstream processes; developing project pipelines; boosting local markets; and mobilising investors.
The discussion also highlighted that developing countries face a dual challenge of climate change and poverty, and therefore, the low-emission transition should generate sufficiently high economic returns to simultaneously reduce poverty and improve human well-being. In this context, pricing pollution to achieve co-benefits of improved human health and climate action, and using revenues to improve equality and access to basic services, gain particular importance. A carbon price of USD 30-40 could help to achieve a universal access to water and sanitation, while the right kinds of infrastructure investment can be an effective means to reduce inequality.

**CLOSING REMARKS**

In closing the event, Gabriela Ramos, OECD Chief of Staff and Sherpa to the G20, highlighted the need for a new growth narrative, reminding the audience that the conventional growth model had failed the world in three major respects: financial crisis, inequality and environment. To this end, a new model with a focus on quality of growth and which incorporates all the three aspects needs to be developed. The OECD is working to support governments in this endeavour through an extensive dissemination strategy for the *Investing in Climate, Investing in Growth* report, to ensure effective communication of the economic case for combining the growth and climate agendas to governments, businesses and civil society.

The Organisation is also working to integrate climate considerations more strongly into its economic forecasting and analysis, building on the work for this report, and is helping governments further understand how mitigation strategies might best be tailored to national circumstances to support accelerated action.

Karsten Sach, Director General for Climate and International Cooperation, BMUB concluded the discussion by noting that failing to take climate change into account will pose a significant challenge to growth and development. Therefore, the new thinking needs to be advanced by the G20 and beyond. The next 10 years will be crucial.