



Implementing the Paris Climate Agreement - a key issue also for the G20

Executive Summary

On January 18th, 2017, China Carbon Forum together with Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), co-organized a panel discussion: ***"Implementing the Paris Climate Agreement - a key issue also for the G20"***, as part of the China Low Carbon Leadership Network (LCLN) event series.

The event featured a panel of distinguished experts and government representatives who shared their views on the role that the G20 can play in supporting implementation of the Paris Agreement. In particular, the panel discussed the role of the newly established G20 Energy Sustainability Working Group (ESWG), and the key issues that it will consider.

The panel included representatives from both China and Germany, and the audience gained insights from governmental, think tank and academic perspectives, especially during the Q&A session. After the discussion, the guests enjoyed a follow-up networking event.

Record of Discussion

The following is an edited synthesis of discussion that took place at the event among panellists (around 50 minutes) and open Q&A with participants (25 minutes). As per convention, individual's comments are not attributed.

The panel noted China's leadership on climate change in recent years, and its significance for future efforts. The last year has also seen rapid action internationally, with the Paris Agreement sending a clear message of determination to industry and society. Action to reduce greenhouse gas emissions

and limit climate change is now underway due to the broad support of not just national governments, but also business and sub-national actors.

This makes the momentum towards action irreversible, regardless of political events which may slow down international efforts somewhat. The Paris Agreement has proven that international action works, and that we can achieve more by acting together rather than acting alone. Climate change is our most significant current challenge, but it is only one of many. Therefore, putting it in to the context of the Sustainable Development Goals (SDGs) is another important mission.

Climate change generates high costs and has become a challenge to our economies and to political stability. It is taking place at an increasingly alarming rate and with increasingly alarming consequences. We have seen record breaking droughts, storms that used to happen infrequently becoming the new normal, and an average of 22.5 million people have been displaced by extreme weather annually in recent years. Besides, figures show that 2016 was the hottest year on record.

Following the Chinese presidency, Germany is considering how it can best use its G20 presidency. The G20 countries are aiming to maximize competitiveness, growth and employment, while respecting wellbeing, equity, inclusiveness and stability in an increasingly volatile world. The G20 countries account for almost $\frac{2}{3}$ of global population, more than $\frac{1}{2}$ of global GDP and $\frac{3}{4}$ of worldwide trade, but also 67% of greenhouse gas emissions. Therefore, successful implementation of the Paris Agreement depends largely on these countries. Together, the G20 can show that implementing the Paris Agreement and the SDGs can not only achieve the environmental goals, but also be economically beneficial.

“Shaping an interconnected world” is the motto of Germany’s G20 presidency. The G20 thus works to foster sustainable development, for which the 2030 Agenda for Sustainable Development and the Paris Agreement provide the key international frames of reference. Germany would like to use its G20 presidency to intensify international cooperation, and it is the G20s job to ensure that globalization benefits everyone. In this respect, it is worthwhile noting the leadership that China has already shown, as that the recent comments by China’s president regarding an interconnected world and open markets are welcome. In these political instable times, the German government is setting a course diametrically opposed to isolationism and any return to nationalism. Climate and energy policy do exactly aim to go ahead in this direction. Consequently, the Germany’s G20 agenda will pursue three principles: building resilience – improving sustainability – assuming responsibility.

The G20 played a crucial role in stabilizing economies after the global financial crisis in 2008. When people start doubting the benefits of globalization, it imperils progress on other challenges like climate change. The German government hopes that the G20 can now help identify solutions and answers to this challenge through the newly-inaugurated G20 Sustainability Working Group (SWG). This working group will bridge the existing G20 Energy Sustainability Working Group (ESWG) with the G20 Climate Sustainability Working Group (CSWG) and should ensure a closer link between energy and climate policy and identify solutions and answers to enable leaders to take the lead when they meet in Hamburg in July this year. Overall actions should be guided by the above mentioned three principles of the German presidency to promote global economic stability, to make the global economy viable for the future, and to take responsibility.

Germany has decoupled economic growth from energy consumption. Since 2006, primary energy consumption has dropped by 9%, GHGs have dropped by 27% from 1990 levels, while GDP has significantly grown by 20%. So, climate policy is modernization policy if done correctly. Climate and energy policy has emerged as a driver of economic growth. The German energy transition ('Energiewende'), has allowed a reduced dependence on imported fuels, but production and maintenance has also increased the local end-value. Renewable energy has created about 360,000 well-paid jobs in Germany. In addition, Germany is benefiting from the increasing global market for green products. PwC has analyzed that Germany's 2020 climate action program will create additional 430,000 new jobs.

The economic benefits of this transition can be multiplied if we provide long-term policy certainty. In Paris, long-term goals were agreed for mitigation, adaptation and finance. This included greenhouse gas neutrality in the second half of the century in order to keep global warming well below 2 degrees Celsius above pre-industrial levels, or 1.5 degrees if possible. Germany developed the first long-term plan towards this goal. It set the goal for near-zero emissions by 2050, and divided the consequent carbon budget between sectors. This gives clear, long-term perspectives for industry, and allows the right incentives in terms of structural change. At the same time, it is a learning process which needs to be updated every five years, taking in to account social learning and technological improvements.

Comprehensive planning for emissions reduction must involve all sectors. For example, Germany has developed a roadmap for greenhouse gas neutrality in the building sector by 2050. In order to reach this objective, we need to take decisions now, given the long life-span of buildings. Investment needs to be realigned towards more sustainable infrastructure. At the global scale, more people will

be living in cities by 2050 than the current total world population. New housing infrastructure for 2.5 billion people, many in China, will need to be provided. The amount of raw materials for this effort will be equal to the amount that has been used since the beginning of industrialization. Aligning investment with sustainable objectives will avoid the carbon lock-in effect, while providing significant economic stimulus at a time of slow growth.

The G20 can help to guide countries on the implementation of their Nationally Determined Contributions (NDCs), while respecting local conditions. The G20 can also take the lead in putting forward the required long-term strategies, taking advantage of mutual learning and encouraging other countries to follow suit. It can also help to build adaptation strategies to become more climate resilient. Finally, it can help to align financial flows with the goals of the Paris Agreement, with a focus on sustainable infrastructure and transitioning the energy sector (including renewable energy, energy efficiency and reducing fossil fuel subsidies).

China's efforts in 2016 to focus on green finance, and in particular the establishment of the G20 Green Finance Study Group, should be commended. This is especially because there is not a level playing field for modern solutions. There are often subsidies or structural obstacles which favor old technologies. The G20's work on green finance can promote transparency and disclosure of the climate risks through the Finance Minister's track, and highlighting for leaders the solutions for a low-carbon future.

Apart from countries, we also should consider how multilateral and national development banks, as well as the private sector, can contribute to the achievement of the Paris goals. In that context, China's establishment of the Asian Infrastructure Investment Bank (AIIB) with high standards, is a positive development.

Germany hopes to set up a G20 Climate and Energy Action Plan, and is grateful for China's support in this. Apart from the issues discussed above, other topics that such action plan could deal with include consideration of how carbon pricing can be a useful tool to incentivize emissions reduction and allow investors to fully account for carbon-related risks. Besides others, it could work together with the private sector and the insurance industry, to improve climate and disaster risk finance for addressing early recovery needs and strengthening resilience to climate change, in particular for the poor and vulnerable.

Germany aims to frame climate change in the context of economic growth, political stability, and equity. So far, climate change has not had a well-established working track under the G20. This was natural while the focus of climate change was on negotiations under the UNFCCC. Now the focus is on making the Paris Agreement and the SDGs an integral part of the global economic and fiscal agenda. This led Chancellor Merkel to express a desire to establish the G20 Sustainability Working Group and make climate and energy policy a permanent item on the G20 agenda.

The first meeting of the SWG took place in December in Munich, where priorities were discussed including long-term planning, and how to best integrate climate change into fiscal policy and changing incentive structures. Besides this, there is important work going on in the fiscal track, including the climate finance study group and green finance study group. Issues relating to fiscal regulation and transparency will stay in the finance track given its relevance. In the end, it all should come together in the leaders' communique.

In 2016, China used its presidency to push forward momentum after the signing of the Paris Agreement, to promote early ratification. This year, however, is a different year, with significant political uncertainties such as the new US administration. The global economy is also still experiencing a slow recovery. Therefore, besides climate change other issues are also of significant importance.

From China's perspective, the important point is not necessarily whether the document proposed by Germany is an action plan or a statement, but rather the elements within it. It could perhaps include a specific call on countries to implement their NDCs and other measures within the Paris Agreement. It could also include elements on adaptation, technology transfer and capacity building needs, according to the requirements of G20 member countries.

The panel expressed a hope that Germany's G20 presidency will maintain the focus on green finance, given the progress made during 2016. For the implementation of NDCs, significant finance is required. In order to implement China's NDC, it has been estimated that about CNY 30 trillion will be required. This is in the context of China's total public finance of CNY 40 trillion. Therefore we can not only rely on public finance to meet the demands of NDC implementation. A proportion of global private sector financial flows will be required. In order to achieve that, action by all of the G20 countries will be required, not just a few.

The 2016 meeting in Hangzhou provided a conceptual framework for green finance within the G20. The panel hopes that under the German presidency, progress can be made on determining how to implement this agenda. Here there is a role for cooperation between the research communities of the G20 countries in order to better inform policymakers.

The panel commented that while there is significant finance required for the changes that are required, there is a sufficient volume of finance already in the market. The problem is that it is invested in the wrong ways. Therefore clear government rules, to direct investment towards social priorities are needed. The IMF estimates that there is about \$600 billion in direct annual subsidies to the fossil fuel industry, with that number rising to \$6 trillion if indirect costs are considered such as air pollution. At the very least, it is pivotal to create a level playing field for future oriented solutions. For this, investors also need to know what the risks of their current investments are, considering climate change and future measures to deal with it. The promotion of transparency in order that both private and public investors can investigate these risks is crucial.

There is a lack of clarity on what green finance means, leading to calls to reach an internationally acceptable definition. However, the panel suggested such efforts may be impossible, given that the circumstances of individual countries vary significantly. However, one could try to identify best practice, and formulate metrics so that different standards in different G20 countries are comparable. This will help to develop a common understanding of what green finance means.

The panel also suggested that rather than the public discourse focusing only on costs, it should be stressed that initial investment in innovation, will reap significant economic benefits in the future. This refers especially in relation to electric mobility, intelligent management of supply and demand for energy. If the new normal is intermittent renewables, there will be many opportunities in the energy market for provision of supply. The costs should also be seen in the context of existing investment in to industries such as coal power, cement and steel, which have significant existing over-capacity. Given the significant social and health benefits of a greener course, it is in our self-interest to invest in green finance.

The panel noted the urgency of the challenge, given the information that climate science is providing. We have already emitted more than half of the atmosphere's total carrying capacity of carbon dioxide if we are to meet the 2 degree goal. Therefore, the G20 has an important role to play in discussing the economic transition that needs to be made. During this process, rather than

measuring economic progress just by material goods, the focus should be set instead on its effect on human welfare. This is the goal of the SDGs.

The panel noted that the banking sector as it currently operates is an obstacle to sustainable development. Banks currently focus on overall profit and short-term returns. They also aim to minimize investment costs by targeting large-scale investment. However, many innovative technologies begin from a small scale, such as distributed power generation. These do not require significant up-front investment, but solve significant challenges. From an economic perspective, in fact, small-scale renewable energy is often by far the most cost-effective tool to address energy poverty in places like sub-Saharan Africa. The way that banks deal with such projects needs to be considered. The panel suggested that Germany and China could work more together on the issues in terms of south-south cooperation.

The panel suggested that innovation can best take place through the interaction of free and open mechanisms promoted by government, enterprise and research institutes, together with planning fueled by incentives. With a clear-cut signal from leaders regarding what is required, innovation will take place.