

THE CLIMATE-ENERGY NEXUS AND THE G20: COMPATIBLE OR MUTUALLY EXCLUSIVE?

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Commitment to global climate action is stronger than ever before, with the Paris Agreement entering into force on 4 November¹ and fresh advances at COP 22 in Morocco. Compared with other recent international agreements, the Paris Agreement was ratified in record time², demonstrating its major importance on the international agenda. The pledge to achieve global decarbonisation could prove to be a game changer in both the climate and energy policy arenas. Yet, climate protection still receives little attention within some major international fora dealing with a broad range of key global issues. The G20 is one crucial example. In 2016 there have been some promising developments under the Chinese presidency on addressing the climate and energy nexus. Germany's upcoming G20 presidency provides a chance to translate the ambition of the Paris Agreement into a roadmap for the phase-out of fossil fuels over the coming decades.

Introduction – Climate, Energy and the G20 Agenda

Initially, G20 summits dealt with issues far removed from ecological concerns, focusing primarily on the global financial system and how to manage the various crises emerging out of the 2007/2008 financial crash. However, particularly since 2010, the forum has shifted from 'crisis management mode' to more conventional cooperation, and its agenda has accordingly broadened to include issues such as energy. Nevertheless, although the energy sector is the largest contributor to global greenhouse gas emissions³, climate issues have played little part in the G20 discussions.

By anchoring an objective to keep global temperature rise to “well-below-2°C” above pre-industrial levels and to “pursue efforts” to limit it to 1.5°C, and translating the objective to the need to reach global emissions to peak as soon as possible, the Paris Agreement dramatically changed global attitudes towards climate change and gave a significant boost to international ambitions to decarbonise

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energy supplies in the medium and long-term. The strong interconnection between climate and energy issues has been acknowledged by key international organisations working on global energy governance and cooperation. As a new IEA report highlights, “[t]he need for deeper emissions reductions corresponding to the increased ambition of the ‘well-below-2°C’ goal of the Paris Agreement points to the need for extensive mitigation action in the power sector”⁴. According to analysis conducted by IRENA, a doubling of the share of renewable energy in the global energy mix by 2030, combined with a doubling of annual energy efficiency improvements, would set the world on a path compatible with limiting global warming to well below 2°C above pre-industrial levels by the end of the 21st century⁵.

**STRONG
INTERCONNECTION
BETWEEN CLIMATE
AND ENERGY
ISSUES HAS BEEN
ACKNOWLEDGED
BY KEY
INTERNATIONAL
ORGANISATIONS**

Climate and energy are highly interdependent⁶. While the energy sector, as the largest source of greenhouse gas emissions, should be at the heart of global climate action, ambitious climate goals can catalyse energy transition and enhance energy security⁷. Both scientists and politicians are increasingly highlighting the importance of the nexus between these closely connected policy areas, and advocating “an approach that integrates management and governance across sectors and scales”⁸.

The G20 states could be decisive in fostering the climate-energy nexus. Representing 75% of global energy demand, 80% of energy-related CO₂ emissions⁹ and 80% of the total global primary energy supply¹⁰, they play a key role in shaping both the global energy and climate agendas. They are also leaders in technology development and innovation, and jointly account for three quarters of the total global deployment potential of renewables up to 2030¹¹.

G20 REPRESENTS:

75%
OF GLOBAL ENERGY
DEMAND

80%
OF ENERGY RELATED
CO₂ EMISSIONS

75%
OF TOTAL GLOBAL
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POTENTIAL OF
RENEWABLES UP TO
2030

What is the current and what will be the future role of the climate-energy nexus in the G20? Did the adoption and entry into force of the Paris Agreement influence the agenda of the G20 fora or vice versa? To what extent are the G20 members already addressing the climate-energy nexus as part of their overall policy portfolio? Will there be a place for the climate-energy nexus in future, given the recent political shifts in the G20 such as Brexit or the result of the US presidential election? These are the main questions this paper deals with. To provide answers to these questions, the paper critically assesses the status of approaches to address the climate-energy nexus in the G20 countries, the outcomes of China’s G20 presidency with regard to climate and energy issues, as well as their interconnection, and provides recommendations for the climate and energy agenda of the German G20 presidency in 2017.

I. China’s G20 Presidency: Background

In 2016 China held the G20 presidency for the first time in history. For China, the G20 summit on 4 and 5 September in Hangzhou was one of the most important diplomatic events of the year, placing it centre stage in global economic and financial governance. China’s top leadership attached great importance to the summit and its substantial

outcomes¹². One of the main reasons for this was its 'Great Power Diplomacy (Da Guo Wai Jiao)' strategy, which lies at the core of China's foreign policy. It aims to showcase the country as a reasonable great power and a respected player, positively shape China's image on the international stage by using soft power, and enhance its 'international status'.

At the same time, environmental concerns are gradually becoming a 'new normal' within China, and are recognised as key concerns in China's national strategy and domestic policy priorities. Increasing pressure to act on environmental issues at the national level and growing recognition of the concept of 'ecological civilisation' are reflected in 13th Five Year Plan (2016-2020)¹³. As China's President Xi Jinping mentioned in his keynote speech at the opening ceremony of the B20 Summit on 3 September 2016 in Hangzhou, "...green mountains and clear water are as good as mountains of gold and silver. To protect the environment is to protect productivity, and to improve the environment is to boost productivity. This simple fact is increasingly recognized by people".¹⁴ As a result, China's national interest in pursuing more sustainable, green development and combating environmental challenges aligned with a stronger focus on climate and environmental topics during its G20 presidency.

II. G20 Member Activities on Climate and Energy

When considering whether the G20 countries have recognised the significance of the climate issue and its strong links to energy, some key G20 members' early ratification of the Paris Agreement could serve as a strong, positive indicator. On 3 September 2016, the US and China submitted their respective instruments to join the Paris Agreement to UN Secretary-General Ban Ki-moon¹⁵. The world's two biggest greenhouse gas emitters made the joint announcement that they would ratify the treaty just one day before the G20 Summit¹⁶: The timing was carefully chosen to inject positive momentum into both the UNFCCC process and the G20 talks. The announcement brought the number of countries that had ratified the agreement up to 26 and their share of emissions to 39%. It therefore represented a major step forward in reaching the 55 threshold for both criteria, which was required for the Paris Agreement to enter into force.

Within the G20, this act of leadership increased the pressure to ratify the agreement on other major players, including the EU, Canada and India. On 5 October 2016, Canada, the EU and a number of the EU Member States (Germany, France, Austria, Hungary, Slovakia, Portugal and Malta), along with Nepal and Bolivia, joined the Paris Agreement, passing the threshold for the Agreement's entry into force.

The ratifications are complemented by an active engagement by most G20 partners in INDC/NDC process: All G20 countries have submitted Intended Nationally Determined Contributions (INDCs) and almost all G20 states (with the exception of Russia and Turkey) have already

ENVIRONMENTAL CONCERNS ARE GRADUALLY BECOMING A 'NEW NORMAL' IN CHINA

EARLY

RATIFICATION OF THE PARIS AGREEMENT

BY SOME KEY G20 MEMBERS HIGHLIGHTS THE SIGNIFICANCE OF CLIMATE ISSUES AND CONTRIBUTED TO THE EARLY ENTRY INTO FORCE OF THE AGREEMENT

submitted their first Nationally Determined Contributions (NDCs) under the Paris Agreement. Energy is mentioned as a key sector in all INDCs and NDCs submitted by G20 countries. All G20 states with the exception of the EU (and its member states), Mexico and the US mention increased renewables deployment to achieve their contributions:

- Australia, Brazil, China, India, Indonesia, and Japan included renewable energy and/or clean energy goals in their INDCs/NDCs expressed as a share in the energy matrix. Turkey mentioned installed capacity targets for renewable energy sources.
- Argentina, Canada, South Africa, Saudi Arabia and South Korea mentioned national policy measures and actions aimed at promoting renewables and increasing energy efficiency in their INDCs/NDCs; Russia generally referred to the use of such measures.

Those states that did not explicitly mention targets, measures or actions in the area of renewable energies or energy efficiency in their INDCs/NDCs still have domestic targets and policies in place: The EU and Mexico did not include renewable targets in their NDCs, but have already codified their goals through domestic legislation on renewable energy development. The US have been implementing national-level policies and measures in the area of clean energy.

III. G20 in China: Climate-Energy Nexus in Focus?

Given the strong support for the Paris Agreement and the momentum carrying forward climate and energy related activities in G20 countries, climate issues could be assumed to now play a bigger role on the G20 agenda – but was that actually the case in 2016? On 31 March, in the Joint Presidential Statement on Climate Change, the leaders of the US and China agreed to “support a successful G20 Summit in Hangzhou, including strong climate and clean energy outcomes” and called on the G20 countries “to engage constructively in international cooperation on energy and climate change”¹⁷.

In the Leaders’ Communiqué, G20 countries confirmed their commitment to join the Paris Agreement as soon as possible and expressed their support for “its timely implementation with all its aspects”¹⁸, which can certainly be regarded as a positive sign. The leaders reaffirmed their commitment to “shaping an affordable, reliable, sustainable and low greenhouse gas (GHG) emissions energy future while utilizing energy sources and technologies”¹⁹. The Energy Ministers’ Communiqué also specifically recognised “the significant role of renewable energy in the context of the UN 2030 Sustainable Development Goals and Paris Agreement”²⁰.

The G20 finance ministers recognised “the importance of the operating entities of the financial mechanism of the United Nations Framework Convention on Climate Change”, welcomed “the endorsement of the Strategic Plan for the Green Climate Fund (GCF)” and called for “the Fund’s continued efforts to scale up its operations”²¹. Agriculture

AMONG G20:

**7 STATES
INCLUDED TARGETS
FOR SUSTAINABLE
ENERGY IN
INDCs/NDCs**

**G20 LEADERS’
COMMUNIQUÉ 2016
CONFIRMED
COMMITMENT TO
JOIN THE PARIS
AGREEMENT AS
SOON AS POSSIBLE**

**G20 ENERGY
MINISTERS’
COMMUNIQUÉ
2016
RECOGNISED:**

**SIGNIFICANT ROLE
OF RENEWABLE
ENERGY IN THE
CONTEXT OF SDGs
AND PARIS
AGREEMENT**

ministers also addressed climate issues, expressing support for the Paris Agreement “including implementation of INDCs”²².

This increased presence of climate issues on the G20 agenda in 2016 notwithstanding, some concerns are nevertheless justified: Paragraph 43 of the G20 Leaders’ Communiqué (the only paragraph devoted solely to climate issues) is placed at the end of the document and focuses almost exclusively on climate finance. It does not mention any other issues, such as action on domestic mitigation and adaptation. Apart from general commitments to implementing the Paris Agreement and fulfilling climate finance obligations, the communiqué does not specify any concrete measures or actions. It also does not make any reference to long-term decarbonisation and does not mention carbon pricing as a cost effective mitigation policy tool.

ALTHOUGH CLIMATE ISSUES WERE MORE PRESENT ON G20 AGENDA IN 2016, A NUMBER OF CONCERNS REMAINED

Furthermore, renewables are just one of the different types of “clean energy” that has been promoted during China’s presidency. Paragraph 24 of the Leaders’ Communiqué highlights the importance of natural gas as a less emission-intensive fossil fuel, with the countries committing “to enhance collaboration on solutions that promote natural gas extraction, transportation and processing”²³, which raises concerns about its compatibility with the goals of the Paris Agreement. The Energy Ministers’ Communiqué also recognises the role of nuclear power in reducing greenhouse gas emissions for the countries that opt to use it²⁴.

Finally, one could argue that climate-energy nexus has already been more obvious in the history of the G20, e.g. during the Turkish presidency in 2015. In particular, the Antalya G20 Leaders’ Communiqué defined climate change as “one of the greatest challenges of our time”²⁵ and established a clear link between climate and energy by stating: “We recognize that actions on energy, including improving energy efficiency, increasing investments in clean energy technologies and supporting related research and development activities will be important in tackling climate change and its effects”²⁶. The paragraph on climate directly followed the paragraph on energy, which was not the case in the respective Hangzhou outcome. However, as discussed in the following section, there are also other areas of activities relevant for the nexus in addition to the Communiqué.

THE COMMUNIQUÉ DOES NOT SPECIFY ANY CONCRETE MEASURES OR ACTIONS, NOR DOES IT CONTAIN ANY LONG-TERM DECARBONISATION VISION

IV. Climate and Energy on the G20 Agenda in 2016

Although the climate-energy nexus did not receive much attention in the Hangzhou Communiqué, single issues related to climate and energy played an important role during China’s G20 presidency. These elements can also serve as entry points for the incoming German presidency. The following section presents an overview of these issues and shows how the Chinese presidency has potentially been able to add more substance to an integrated approach, even if the climate and energy nexus remains fragmented within the G20.

a) Climate Finance

The Chinese presidency saw the continuation of the previous G20 work on climate finance. Since its establishment in 2012, the Climate Finance Study Group (CFSG) has been working on the issue of financial flows from the public sector²⁷. In June 2016 the G20 CFSG issued a report on 'Promoting Efficient and Transparent Provision and Mobilization of Climate Finance to Enhance Ambition of Mitigation and Adaptation Actions', which includes the member states' views on how to increase transparency and efficiency of climate finance and take better account of developing countries' priorities²⁸.

The Communiqué of the G20 Finance Ministers and Central Bank Governors reaffirmed that "[d]eveloped country Parties shall provide financial resources, including support provided through the Green Climate Fund, to assist developing country Parties with respect to both mitigation and adaptation, in continuation of their existing obligations under the United Nations Framework Convention on Climate Change (UNFCCC). Other Parties are encouraged to provide or continue to provide such support voluntarily"²⁹. Although the finance ministers referred to "other Parties" as voluntary finance providers, which reflects the spirit of the Paris Agreement³⁰, the Leaders' Communiqué preserves a more traditional distinction between developed countries that are to fulfil the UNFCCC commitment "in providing means of implementation including financial resources" for mitigation and adaptation actions, and developing countries that will receive this assistance.

b) Green Finance

Aside from the "existing" issue of climate finance, China's presidency launched a new work stream on green finance. A Green Finance Study Group (GFSG) was set up in 2016, co-chaired by China (represented by the People's Bank of China) and the UK (the Bank of England), with the United Nations Environment Programme (UNEP) acting as a secretariat³¹. The GFSG is focused on private sector finance and comprises more than 80 members including G20 countries, invited countries beyond the G20, international organisations and think tanks. The group published a G20 Green Finance Synthesis Report and developed voluntary options to enhance the financial system's ability to mobilise private capital for green investment.

In the 2016 G20 Leaders' Communiqué, the countries recognized the necessity of scaling up green finance to support environmentally sustainable growth globally³². The leaders concluded that the "development of green finance faces a number of challenges, including, among others, difficulties in internalizing environmental externalities, maturity mismatch, lack of clarity in green definitions, information asymmetry and inadequate analytical capacity", but agreed that many of them could be addressed in collaboration with the private sector. In particular, G20 countries support efforts "to provide clear

CLIMATE FINANCE:

**INCREASING
TRANSPARENCY AND
EFFICIENCY OF
CLIMATE FINANCE
AND TAKING BETTER
ACCOUNT OF
DEVELOPING
COUNTRIES'
PRIORITIES**

GREEN FINANCE:

**ENHANCING
FINANCIAL
SYSTEM'S ABILITY
TO MOBILISE
PRIVATE CAPITAL
FOR GREEN
INVESTMENTS**

strategic policy signals and frameworks, promote voluntary principles for green finance, expand learning networks for capacity building, support the development of local green bond markets, promote international collaboration to facilitate cross-border investment in green bonds, encourage and facilitate knowledge sharing on environmental and financial risks, and improve the measurement of green finance activities and their impacts”³³.

c) Fossil Fuel Subsidies

Fossil fuel subsidies are a key topic under the Energy Sustainability Working Group related to climate change. Back in 2009 the G20 made a vague pledge to phase them out but did not specify a timeline. In 2016 the G20 states reaffirmed their commitment “to rationalize and phase out inefficient fossil fuel subsidies that encourage wasteful consumption over the medium term, recognizing the need to support the poor”³⁶. However, the states failed again to agree on a common timeline, despite the fact that earlier this year the G7 jointly pledged to phase out of fossil fuel subsidies by 2025. Nevertheless, the US³⁷ and China³⁸ took a step forward and completed a G20 peer-review process related to actions to reduce fossil fuel subsidies. The results of the two countries’ evaluations were reported at the G20 in Hangzhou. The next step will be a peer review by Germany and Mexico in 2017.

d) Sustainable Energy

Aside from the issue of fossil fuel subsidies, the Energy Sustainability Working Group agenda comprises three major topics: energy access, the expansion of renewables, and the promotion of energy efficiency³⁹.

On the issue of renewables, the G20 Voluntary Action Plan on Renewable Energy was adopted in 2016 “to consolidate the leading role that the G20 has in the global renewable energy deployment and development”⁴⁰. The action plan’s introduction makes clear the link between the development of renewables and the achievement of climate goals: “Renewable energy, inter alia, has made, and will continue to make, significant contribution on this front, due to its zero or near zero emissions of greenhouse gases and reduction of other conventional pollutants”⁴¹. Proposed actions in the plan include, for example, the continued implementation of the G20 ‘Toolkit of Voluntary Options for Renewable Energy Deployment’, in-country assessments of the cost reduction potential, strengthening the enabling framework for renewable energy investment, and commissioning IRENA, in close cooperation with G20 country experts, to expand the initial REmap analyses to individual country reports for each voluntarily participating G20 member. The reports will be updated annually and show the most recent progress in renewable energy development in participating countries⁴².

With regard to energy access, the G20’s work is guided by the G20 Voluntary Collaboration Action Plan on Energy Access⁴³, which was adopted in 2015. Under China’s presidency, the initial focus on Sub-

FOSSIL FUEL SUBSIDIES:

CONCLUSION OF THE US-CHINA PEER REVIEW PROCESS BUT NO ENDORSEMENT OF G20 COMMON PHASEOUT TIMELINE

ENERGY ISSUES:

ACTION PLAN AND PROGRAMME ON IMPROVING ENERGY ACCESS; EXPANDING RENEWABLES AND PROMOTING ENERGY EFFICIENCY

Saharan Africa was extended to the Asia-Pacific region⁴⁴: “We endeavour to work with Sub-Saharan and Asia-Pacific countries to improve universal access to affordable, reliable, clean, sustainable and modern energy services, particularly by addressing barriers to electricity access”⁴⁵.

On energy efficiency, the G20 members agreed to demonstrate global leadership in promoting energy efficiency and adopted the G20 Energy Efficiency Leading Programme⁴⁶, which builds on the G20 Energy Efficiency Action Plan. They extended energy efficiency collaboration in six areas (vehicles, networked devices, finance, buildings, industrial processes and electricity generation) to several other work streams (Super-Efficient Equipment and Appliance Deployment initiative, Sharing Best Available Technologies and Best Practices, District Energy Systems, Energy Efficiency Knowledge Sharing Framework, Energy End-Use-Data and Energy Efficiency Metrics)⁴⁷.

In addition, the Hangzhou Communiqué mentions several other issues related to energy, e.g. the launch of the G20 Initiative on Supporting Industrialization in Africa and LDCs, to strengthen their inclusive growth and development potential. Instruments to achieve this include “promoting investment in sustainable and secure energy, including renewables and energy efficiency”⁴⁸. The communiqué also emphasises the need for a more effective and inclusive global energy architecture, enhanced energy security, diversification of energy sources and routes, and energy market transparency⁴⁹.

e) Climate-Related Financial Disclosures

At the request of the G20, last year the Financial Stability Board (FSB) engaged in the review process to determine how the financial sector can incorporate climate-related issues into financial reporting. For this purpose, in April 2015 the FSB set up the Task Force on Climate-related Financial Disclosures (TCFD) (formally launched in December 2015) to undertake an assessment of what constitutes efficient and effective disclosure, and design a set of recommendations for voluntary company financial disclosures of climate-related risks⁵⁰. The membership of the task force is balanced between preparers and users of financial disclosures. The TCFD comprises members from both financial and non-financial companies across a range of countries and relevant areas of expertise. Further, the task force seeks to develop recommendations for voluntary climate-related financial disclosures that are consistent, comparable, reliable, clear, and efficient, and provide decision-useful information to lenders, insurers and investors⁵¹.

On 1 April 2016, the TCFD published a Phase I Report⁵², which was followed by a public consultation period. The second phase is to continue though until Q1 2017 and conclude with the release of the Phase II Report. Although the 2016 G20 Leaders’ Communiqué does not mention the work of the task force, which is a stand-alone process

G20 LEADERS’ COMMUNIQUÉ 2016 EMPHASISED:

**NEED FOR A MORE
EFFECTIVE AND
INCLUSIVE GLOBAL
ENERGY
ARCHITECTURE**

CLIMATE- RELATED FINANCIAL DISCLOSURES:

**INCORPORATING
CLIMATE-RELATED
ISSUES INTO
FINANCIAL
REPORTING**

**A STAND-ALONE
PROCESS TO FEED
BACK TO G20 IN 2017**

mandated by FSB, this process will be relevant for Germany's presidency of the G20, as it aims to publish the final report by Q1 2017.

f) G20 and the Climate-Energy Nexus in 2016

The role of the climate-energy nexus under China's G20 presidency may be assessed from two different angles. On the one hand, there are a number of positive signs indicating that climate issues are slowly finding their way onto the G20 agenda, which had long been quiet on if not indifferent to them. Most notably, the climate-energy nexus was referred to in the energy work stream and specifically mentioned in the new G20 Voluntary Action Plan on Renewable Energy. A particular highlight has been the new initiative on green finance.

However, on the other hand, the Leaders' Communiqué does not show much concrete evidence of action being taken to achieve the real integration of these two policy areas. It also lacks any long-term common vision to address the climate-energy nexus on the part of the G20 countries.

The G20 still does not have a formal working process on climate (which is different as energy with its own working group) and the Hangzhou outcomes do not commit the G20 states into any specific mitigation or adaptation goals in either the short or long term, apart from the general reference to the Paris Agreement.

Moreover, renewables do not appear to be at the core of energy action, but rather constitute just one part of a broader "clean energy" package, raising concerns about compatibility with the climate goals. The transformational change towards long-term deep decarbonisation envisioned in the Paris Agreement has therefore not been adequately endorsed or reflected in the G20 process to date.

V. New Developments in late 2016

Momentum to global climate action peaked again in late 2016, with the Paris Agreement entering into force on 4 November and new developments at COP 22 in Morocco. With the entry into force of the Paris Agreement international climate policy definitively moved into the implementation stage. Despite the new challenges that the election of Donald Trump as the next US president (right in the middle of the COP22) creates, this momentum is likely to continue and can positively influence the German G20 presidency if Germany takes appropriate strategic advantage of it. With its stances on climate and energy, the Trump administration could do more to damage global cooperation on climate change than any previous US administrations. However, that will not mean the collapse of Paris Agreement by any means. To date, 115 out of the 197 parties to the Convention have ratified the Paris Agreement indicating its broad support. In recognising the climate change challenge as a global issue to solve together linked to their own

CURRENT GAPS

1. **LITTLE EVIDENCE OF ACTION TO ACHIEVE REAL INTEGRATION OF ENERGY AND CLIMATE POLICY IN G20**
2. **NO LONG-TERM VISION ON CLIMATE-ENERGY NEXUS IN G20**
3. **NO FORMAL WORKING PROCESS ON CLIMATE WITHIN G20**
4. **RENEWABLES JUST ONE PART OF "CLEAN ENERGY" PACKAGE**

interests, countries have agreed on the direction of travel – low carbon and decarbonisation. The battle now will be to determine on the scale of the ambition and the pace of the transformation.

The nature of Paris Agreement means that it facilitates rather than forces countries into action. This flexible approach made it possible to get more countries engaged and set the stage for a truly global effort to cut emissions – which in turn makes it more resilient to shocks or political change in single countries. The new US administration may also find that it is not necessary or would cost too much political capital to withdraw from the Paris Agreement, which would take up to four years, or the UNFCCC as a whole.

A big concern is how the change in the US position and its diplomatic approach might impact on other major players – also within the G20, and particularly China – to affect global climate diplomacy as a whole. So far we have seen positive messages and gestures from China both before and after the US election. On 4 November the State Council published the 13th Five-Year Work Plan for Greenhouse Gas Emission Control, which outlines China’s climate and energy related measures and targets for 2016 to 2020. This reaffirmed China’s NDC commitments, as well as the decarbonisation path outlined in the overall 13th Five Year Plan released earlier in the year. After the US election, Chinese officials have not only confirmed the country’s continued commitment to climate action in the context of the Paris Agreement’s implementation and South-South cooperation; they have also stressed their willingness to continue working with the US and other countries. The Chinese voice includes Xie Zhenhua, China’s top climate negotiator and special envoy on climate change, Liu Zhenmin, China’s vice foreign minister, and Xie Ji, the newly appointed head of the climate change department of the National Development and Reform Commission and deputy chief of the Chinese delegation to COP22.

Overall, China has fairly strong domestic and international incentives to engage in domestic climate actions and to play a high-profile role in the continuing global climate change talks. As Zou Ji, deputy director general of China National Centre for Climate Change Strategy and International Cooperation put it: “China’s climate strategy and policy is in accordance with China’s national interest and is not dependent on the US presidency. The fundamental incentive is China’s need to drive growth by escalating the economic transition, improving air quality, boosting the growth rate through efficiency improvements, and strengthening energy security.”⁵³ China’s active and constructive role, together with the EU (and key member states like Germany that are championing climate action) and other emerging economies like Mexico and Brazil, will be essential for counter-balancing the negative effects of the Trump administration on international climate diplomacy and actions.

In addition, new momentum is being created by other alliances outside the G20. The Climate Vulnerable Forum, a group of highly vulnerable

**THE FLEXIBLE
APPROACH AND
NATURE OF THE
PARIS AGREEMENT
MAKES IT MORE
RESILIENT TO
SHOCKS OR
POLITICAL CHANGES
IN SINGLE
COUNTRIES**

**“CHINA’S CLIMATE
STRATEGY AND
POLICY IS IN
ACCORDANCE WITH
CHINA’S NATIONAL
INTEREST AND IS NOT
DEPENDENT ON THE
US PRESIDENCY”**

**A GROUP OF HIGHLY
VULNERABLE
STATES IS SEEKING
TO LEAD BY
EXAMPLE,
COMMITTING TO A
100 % RENEWABLES
FUTURE**

states, is seeking to lead by example with a highly ambitious vision of how it is possible to support decarbonisation with activities spanning the climate-energy nexus. In Marrakesh these countries announced their intention to transition to 100 percent renewable energies. The coalition has now grown to nearly 50 states. Although taken together their energy-related emissions might only equal those of France, their vision and ambition can serve as a valuable example for the G20 countries, which are economically far better positioned.

VI. Conclusions for Germany's G20 Presidency: Great Potential and Great Challenges

Insufficient attention to the climate-energy nexus in the G20 in general, and under China's G20 presidency in particular - despite progress in some relevant individual topics-, does not imply that the nexus could not be taken up by the German presidency over the coming year. Indeed, we believe that this is an important strategic contribution that Germany could make. Whereas in 2016 China, like every other G20 host country, was significantly influenced by domestic agenda setting and issues such as the "clean energy" package or green finance that were important at home, Germany has the chance to bring in a new dynamic. As a country where the energy transition is already fully underway and long-term climate goals are being pursued, Germany could bring the climate-energy nexus firmly into the G20 process.

The entry into force of the Paris Agreement provides an opportunity to build a bridge between the current Chinese presidency and the Argentinian presidency in 2018. These two countries' priorities and circumstances are different to Germany's, but they are committed to the same global climate goals. The G20 can send a signal for the early implementation of the Paris Agreement, given that 2018 will be the year of the first global stocktaking review of countries' targets and commitments under the Paris Agreement.

An even stronger signal could be for Germany's G20 Presidency to bring together the various activities of the G20 member states in the realm of climate and energy policy within a common plan. The existing country-specific contributions to climate action include already energy policy incentives that can help to harmonise climate and energy policy goals. In addition, multiple countries are pursuing approaches that put a price on carbon and establish a discussion on the actual costs of climate change. By using these activities as a starting point a plan can be developed to be submitted to the G20 heads of state in July 2017, including a concrete roadmap for a phase out of fossil fuels and phase in of renewables.

By doing so, the German G20 presidency can actively mainstream climate issues into the G20 agenda and ensure continued progress on various relevant existing topics. A roadmap on decarbonisation can help to intensively promote the integration of climate and energy issues, and draw links between the climate and energy agenda - for example, by focusing more on how exactly energy policy can support

AS A COUNTRY WHERE ENERGY TRANSITION IS FULLY UNDERWAY AND LONG-TERM CLIMATE GOALS ARE PURSUED, GERMANY COULD BRING CLIMATE-ENERGY NEXUS FIRMLY INTO G20 PROCESS

TO DOs OF GERMAN G20 PRESIDENCY:

- 1. BRING TOGETHER VARIOUS CLIMATE AND ENERGY ACTIVITIES OF G20 STATES WITHIN A COMMON PLAN**
- 2. DEVELOP A ROADMAP ON DECARBONISATION OF ENERGY SECTOR**

long-term low-emission transformation and how to guide investments accordingly.

As a potential first step to this end, we suggest the German presidency organize a joint ministers' meeting, either by inviting the ministers in charge of climate change to join in the energy ministers' meeting or by holding a separate meeting for them before or after it. Ministers should discuss their common long-term vision and policies, with a focus on the just transition of economies and how to enable strategies to exit from fossil fuels. This discussion could help to inform the G20 summit.

The G20 communiqué should include the outcome of these discussions to underscore the importance of the climate-energy nexus and set out a clear long-term vision guided by and bound to the Paris Agreement. As a complementing initiative, the German presidency could also commission a study – for example, by setting up an expert panel to determine what the Paris Agreement means for the G20 countries and their energy agenda. This study could seek to define a roadmap for decarbonising their future energy supply, and should emphasise the enormous social, economic and environmental co-benefits of such a transformation process.

This notwithstanding, the process of mainstreaming climate issues is likely to present significant challenges for the G20, given recent political shifts such as the US president election. In view of the new and dynamic political context, some may be concerned as to whether the G20 can play a role in fostering climate issues at all. The answer is provided by the Paris Agreement, which states that all parties without exception are to undertake ambitious efforts to achieve the goals of the treaty⁵⁴. As the drivers of global trends in GHG emissions, the main source of technological innovation and key determinants of the dynamics in international energy policy, the G20 states simply cannot be excluded from this – rather they are expected to be the driving force.

All in all, there is significant potential for building synergies and mutual reinforcement on climate and energy issues. More consistent coordination of these two areas at international level could catalyse change and help to achieve more ambitious action and greater results. "Bringing climate discussions into energy dialogues can be about more than just forging a good climate deal – it can also be about shaping international energy choices over the decades ahead"⁵⁵.

3. DRAW LINKS BETWEEN CLIMATE AND ENERGY AGENDA, e.g. BY ORGANISING A JOINT MINISTERS' MEETING AND COMMISSIONING A STUDY

4. EMPHASISE CLIMATE-ENERGY NEXUS IN THE LEADERS' COMMUNIQUÉ WITH A CLEAR VISION GUIDED BY PARIS AGREEMENT

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- ¹² China's most authoritative document, the report of the Chinese Communist Party's (CCP's) 18th Party Congress, confirmed that the Chinese government places the greatest emphasis on the G20, with the wording "participate [in] international affairs with a more positive attitude, play as a responsible big country." Additionally, it specified that "China will positively participate [in] multilateral affairs, support the UN, the G20, Shanghai Cooperation Organization and BRICS to play a positive role." This is the first time China expressed an overtly positive attitude toward participation in global governance.
- ¹³ Early this year, China drew up the outlines of the 13th five-year plan for economic and social development. These outlines call for implementing the vision of innovative, coordinated, green, open and shared development, addressing acute challenges of uneven, uncoordinated and unsustainable development, and ultimately achieving a moderately prosperous society in all respects (Xi Jinping).
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