20 SOLUTION PROPOSALS FOR THE G20

from the T20 Engagement Group

ABOUT THE T20

The Think20 (T20) brings together research institutes and think tanks from the G20 countries in an independent, open network that facilitates interaction among its members, the policy community and the broader public. The T20 develops policy recommendations within thematic Task Forces, each comprising excellent researchers from different G20 countries covering the following policy areas: Digitalization, the 2030 Agenda for Sustainable Development, Climate Policy and Finance, G20 and Africa, Global Inequality and Social Cohesion, Forced Migration, Toward Ending Hunger and Sustainable Agriculture, Financial Resilience, Trade and Investment, Circular Economy, International Cooperation in Tax Matters, and Resilience and Inclusive Growth. The policy recommendations of the T20 Task Forces are published as Policy Briefs on the G20 Insights Platform (www.g20-insights.org), a web-based hub for policy analysis to support G20 policy-making. Under the German G20 Presidency in 2016/17, the T20 is coordinated by the Kiel Institute for the World Economy (IfW) and the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE).

ABOUT THIS REPORT

This report, by the co-chairs of the T20 process during Germany's G20 Presidency, presents 20 key policy recommendations for G20 policy-makers and stakeholders. The policy recommendations are formulated concisely to be easily accessible to those seeking a short summary of the main conclusions. Readers who are interested in the detailed recommendations are referred to the Policy Briefs in the G20 Insights Platform (www.g20-insights.org). This report includes only a selection of policy recommendations that have been chosen for their novelty, ease of implementation and relevance to the G20 during the German Presidency. The G20 Insights Platform contains the full range of T20 policy recommendations.

This report is the product of intensive teamwork. First and foremost, we are deeply indebted to Axel Berger and Dennis Görlich for their many important insights and editorial work. Second, our thanks go to Esther Ademmer, Toman Barsbai, Anna Breling, Ruth Delzeit, Thomas Fues, Sören Hilbrich, Julian Hinz, Adolf Kloke-Lesch, Rolf Langhammer, Jan Ohnesorge, Sonja Peterson, Matthias Raddant, Jakob Schwab, Agnes Tischler-Lechthaler, Gerrit Wiesmann and Peter Wolff, and the team and advisory board of G20-insights.org. Finally, all the credit for the underlying ideas obviously goes to the authors of the many innovative and useful Policy Briefs that we have received as part of the T20 process.

A GLOBAL VISION FOR THE G20

UNIQUENESS OF G20

The G20 has been designed to be flexible in its responses to global problems. Unlike other international fora, its mandate is not narrowly defined. It lacks a secretariat with rigid departments. Its member states are sufficiently small in number to make collective leadership possible. The G20 countries make up two-thirds of the world's population, 85 per cent of gross world product, 80 per cent of world trade and 80 per cent of global greenhouse gas emissions and resource consumption. The G20 provides face-to-face contact among national leaders to promote trust for collective action in response to problems as they arise. The issues on the G20 agenda can be addressed through ministers' meetings and expert groups, constituted flexibly. The G20 gives voice to a variety of non-state actors through various Engagement Groups.

In all these respects, the G20 is unlike any other forum of global governance. It can set its own agenda. The G20 Presidency rotates from one country to another annually and each Presidency sets its own priorities. The G20 process has created a transnational network of communication, people, and discourse on global challenges and interconnectivity, global governance and global commons, globalization and human development, and concrete collective action. Thus, the G20 should be well-suited to responding flexibly to major global problems as they arise.

THE GROWING AGENDA OF THE G20 TOWARDS THE GERMAN PRESIDENCY IN 2017

The G20 was impressively successful in responding to the financial and economic crisis of 2008, providing a desperately needed fiscal and monetary stimulus, promoting financial stability and discouraging protectionism and currency devaluations. Through its focus on macroeconomic stability, the G20 made a major contribution to societal wellbeing and stability. The G20's response fell comfortably into its usual remit, centered on economic growth and financial stability.

Since then, times have changed. In response to problems of rising inequalities, the G20 purview widened to inclusive growth. In response to proliferating environmental problems, the focus of the G20 was widened further to sustainable, inclusive growth. Under the current German G20 Presidency, the purview also includes resilience in response to economic, environmental, social and political shocks. Germany's G20 agenda summarizes these priorities as "building resilience, improving sustainability and assuming responsibility". These priorities include important topics of future concern such as shaping digitalization, and cooperating with and investing in Africa, which the T20 has supported through international conferences.

Germany has faced an important tradeoff in setting its G20 agenda. The broader the agenda, the better it responds to today's major global problems, which cover economic, environmental and social issues, but the more difficult it is to achieve focus of attention on policy outcomes. How broad should the G20's agenda be? In our judgment, the answer is straightforward and has far-reaching implications that have not yet been widely recognized.

The fundamental mission of the G20 should be to promote the creation of a global framework of institutions, policies and norms that meet human needs. In particular, the G20 should support a world order in which evolving human needs – beginning with the most basic and urgent ones – are satisfied adequately through the workings of the world economy. In times when the success of well-managed economies is closely tied to societal success, it is appropriate for the G20 to focus on global economic management. When economic and social progress diverge, the G20 agenda needs to extend beyond purely economic concerns.

During the global financial economic crisis of 2008, preventing a recurrence of a worldwide depression as in the 1930s was essential to avoid massive worldwide social hardship and unrest. Economic and social performance were reasonably aligned.

Nowadays, however, such circumstances no longer prevail. Driven by the interlocking forces of globalization, technological advance and financialization, economic success is no longer in lockstep with social success. Evidence abounds. In many advanced industrialized countries, the growth in aggregate real income has been accompanied by rising inequalities and stagnant living standards for the common folk. The space for civil society has shrunk in some parts of the world and is being transformed in others. Social protests regularly surrounding the G20 summits give voice to a popular discontent with the globalization process in developed and developing countries. This perceived decoupling of economic and social performance also helped generate the discontent that influenced recent the US election outcome and the UK's decision to leave the EU.

Thus, the G20 would be in danger of under mining its legitimacy by focusing exclusively on its traditional narrow agenda to promote aggregate worldwide economic growth and financial stability, while ignoring

the spreading worries about broad-based job prospects and the unease about how the gains from globalization are shared. After all, given the G20's unique role as a flexible decision-making forum with global reach, the G20's legitimacy depends on its ability to promote global social welfare. Consequently, a narrow focus on economic issues is appropriate only so long as overall economic prosperity is closely tied to social prosperity. In the presence of rising inequalities worldwide, it was appropriate for the G20 to broaden its focus from growth to inclusive growth.

Meanwhile, it has become evident that accelerating global warming and further pressure on local and global ecosystems is threatening the wellbeing of current and future generations, as well as international security. For this reason, the existing growth patterns cannot be scaled up. The time frame in which to avoid global warming beyond two degrees Celsius is very narrow. The two degrees guardrail requires a decarbonization of the global economy by mid-century, 2070 at the latest. Global urban, mobility and energy infrastructures will double by 2050 and need to be adapted for decarbonization urgently. Stopping the degradation of the oceans, as well as land and water resources, is equally important. Rapid, worldwide action is therefore needed to build a global economy capable of creating and sustaining human welfare within the planet's boundaries. It is thus appropriate for the G20 to broaden its focus from inclusive growth to sustainable development in its economic, social and environmental dimensions.

Finally, the proliferation of interlocking economic, environmental and social shocks requires the G20 to devote itself to building resilience. The social and political implications of these modifications of the G20 agenda have yet to be worked out, though some T20 contributions provide guidance.

BUILDING A NEW GLOBAL VISION

The time has come for the G20 member states to embrace a common vision that enables the world's population to achieve an economically prosperous, environmentally sustainable, socially inclusive future that is resilient with respect to unforeseen shocks. This common vision is necessary, since the world now faces economic, environmental and social problems that are globally interconnected – problems that no country can tackle on its own. We live in a world that is economically, environmentally and technologically highly integrated, but socially and politically increasingly fragmented. In this context, the G20 must welcome the diversity of norms and values, as well as national, cultural and religious affiliations, between and within its member countries. This diversity is humanity's best hope of generating creative and constructive responses to the G20 challenges, much as biodiversity is nature's best hope of generating creative and constructive responses to environmental challenges. The G20 member states, along with all other states, must follow their distinctive destinies, while sharing a common vision for dealing with problems that they all share.

This common vision should be based on three very simple ideas:

1) The future of humankind depends on learning to stabilize and manage the global commons, such as the globally interconnected financial systems, the climate system, the oceans, biodiversity, and global water and land resources. Human wellbeing and the future of human civilization build on these foundational global commons. Universal access to education, health, and housing should also be viewed as global commons, as they not only create prosperity, but are also preconditions for peace and security, as well as problem solving capacities

2) Managing these global commons requires investments in, and social innovations towards, a comprehensive culture of global cooperation and a system of global collective action. This endeavor must be the outcome of continuous teamwork in the family of nations. The culture of cooperation must be developed as complementing, rather than substituting for, national and local cultures. The G20, complementing existing multilateral institutions, has an important role to play in framing global collective action in consonance with national and local initiatives. In today's world of conflict and terror, this vision might be seen as naïve. But it is the only realistic shift in perspective needed to create the cornerstones of a peaceful and prosperous, interconnected human society.

3) Global governance from the top alone will not work. The process of globalization and global governance needs to become people-centered. This implies that the G20 agendas, as they evolve from year to year, must be focused on delivering global wellbeing, and the G20 priorities – economic, social, and environmental – must be derived from this focus. The G20 agendas must rest on a common vision in which human flourishing and empowerment are central.

This vision draws significantly on the following policy briefs, though the responsibility for its content lies with Dirk Messner and Dennis Snower, the co-chairs of the T20 process.

Anheier, Helmut, Jack Knott and John Burns, "Civil Society Challenged: Towards an Enabling Policy Environment," T20 Policy Brief, February 15, 2017 (http://www.g20-insights.org/policy_briefs/civil-society-challenged-towards-enabling-policy-environment/)

Cleary, Séan, "Reconceptualising Transnational Governance: Making Global Institutions Fit for Purpose," T20 Vision Brief, March 22, 2017 (http://www.g20-insights.org/policy_briefs/reconceptualising-transnational-governance-making-global-institutions-fit-purpose/)

German Advisory Council on Global Change, "Development and Justice through Transformation: The Four Big I's," T20 Vision Brief, May 4, 2017 (http://www.g20-insights.org/policy_briefs/development-justice-transformation-four-big-2/)

Kelly, Colm and Blair Sheppard, "Realigning Business, Economies and Society," T20 Vision Brief, March 21, 2017 (http://www.g20-insights.org/policy_briefs/realigning-business-economies-society/)

Narlikar, Amrita, "Can the G20 Save Globalization?," T20 Vision Brief, April 6, 2017 (http://www.g20-insights.org/policy_briefs/can-g20-save-globalisation/)

Samans, Richard and Nicholas Davis, "Advancing Human-Centered Economic Progress in the Fourth Industrial Revolution," T20 Vision Brief, May 9, 2017 (http://www.g20-insights.org/policy_briefs/advancing-human-centred-economic-progress-fourth-industrial-revolution-leadership-agenda-g20-governments/)

Snower, Dennis, "Beyond Capital and Wealth: Challenges of the G20," T20 Vision Brief, May 24, 2017 (http://www.g20-insights.org/policy_briefs/beyond-capital-wealth-challenges-g20/)

Wallis, Stewart, "Creating a Future Where All Are Valuable – A New Narrative for the Richer Countries in the World," T20 Vision Brief, May 8, 2017 (http://www.g20-insights.org/policy_briefs/creating-future-valuable-new-narrative-richer-countries-world/)

Kaiser, Karl, Carlos Lastra-Anadón, Henning Meyer, Manuel Muñiz, Manuel Torres, "Technological Change, Inequality and The Collapse of the Liberal Order", T20 Vision Brief, April 10, 2017 (http://www.g20-insights.org/policy_briefs/technological-change-inequality-collapse-liberal-order/)

Alexandroff, Alan, Bertrand Badré, Amar Bhattacharya, Colin Bradford, Roger Burckhardt, Andrew Cooper, Homi Kharas, José Siaba Serrate, Brent Sutton, Yves Tiberghien, "Empower, Include, and Inspire: G20Public Leadership to Advance Responsibility, Resilience and Sustainability for a Fair Global Economy," T20 Vision Brief, April 30, 2017 (http://www.g20-insights.org/policy_briefs/empower-include-inspire-g20-public-leadership-advance-responsibility-resilience-sustainability-fair-global-economy/)

Find all Policy Briefs on **g20-insights.org**

G20 INSIGHTS

RECOMMENDATIONS

The following are a selection of important recommendations made by T20 Task Forces in their Policy Briefs contained in the G20 Insights Platform (www.g20-insights.org).

DIGITALIZATION

Digitalization is a fundamental driver of global change. While it promises an overall increase in welfare and growth in the long run, it implies significant transition costs and social frictions in the short run. These include job automation, geographical shifts and concentration of economic activity, or altered patterns of comparative advantage. G20 members are the major drivers of the digital revolution. Building national and global frameworks for an inclusive, human-centered and secure digitalization is becoming fundamental to G20 activities.

1 COLLABORATE ON EMPLOYMENT AND EDUCATION POLICIES FOR THE DIGITAL AGE

- Remove barriers to job reallocation to transition workers into new jobs.
- Share knowledge on best practices to promote geographical labor mobility.
- Create global digital platforms for education and training.
- Measure and standardize digital literacy across the G20.
- Initiate a G20 commission that creates a report card on the Internet for Everyone in G20 countries, with gender disaggregated metrics.
- Take socio-cultural gender norms into account in the design of education and training polices, e.g. when setting the timing of training courses.

Frey, Carl Benedikt, "The Future of Jobs and Growth: Making the Digital Revolution Work for the Many," T20 Policy Brief, March 18, 2017 (http://www.g20-insights.org/policy_briefs/the-future-of-jobs-and-growth-2/)

Chetty, Krish, Nozibele Gcora, Jaya Josie, Wenwei Li, Qigui Liu, Ben Shenglin, "Bridging the Digital Divide: Measuring Digital Literacy," T20 Policy Brief, April 6, 2017 (http://www.g20-insights.org/policy_briefs/bridging-digital-divide-measuring-digital-literacy/)

Snower, Dennis, "The Dangerous Decoupling," T20 Vision Brief, May 11, 2017 (http://www.g20-insights.org/policy_briefs/the-dangerous-decoupling/)

Aneja, Urvashi, Krish Chetty, Nozibele Gcora, Jaya Josie, Vidisha Mishra, "Bridging the Digital Divide: Skills For The New Age," T20 Policy Brief, March 25, 2017 (http://www.g20-insights.org/policy_briefs/bridging-digital-divide-skills-new-age/)

2 COOPERATE IN CREATING DIGITAL SAFEGUARDS

- Improve the safety of digital networks by requiring internet service providers to give early warning of new infections and help customers fix vulnerabilities.
- Introduce certification requirements for third-party vendors to limit illicit activity.
- Report on options to improve cyber defenses at power facilities.
- Require that the Internet of Things (IoT) devices be patchable in a reasonable time frame.
- Legally require vendors and ISPs to offer life-long security updates.
- Promote the adoption of the Internet Society's Mutually Agreed Norms for Routing Security (MANRS).
- Coordinate an internationally consistent IoT/Software Bill of Materials.
- Legally require vendors and ISPs to offer life-long security updates.

Carin, Barry, "G20 Safeguards Vulnerabilities of Digital Economy, with Financial Sector Focus," T20 Policy Brief, April 5, 2017 (http://www.g20-insights.org/policy_briefs/g20-safeguards-vulnerabilities-digital-economy-financial-sector-focus/)

Twomey, Paul, "Addressing Market Failures to Improve the Health of the Digital Infrastructure," T20 Policy Brief, March 22, 2017 (http://www.g20-insights.org/policy_briefs/addressing-market-failures-improve-health-digital-infrastructure/)

3 ADOPT MEASURES TO SAFEGUARD THE FINANCIAL SYSTEM FROM CYBER ATTACKS

- Refrain from using cyber attacks and improve the digital infrastructure to ensure the resilience of the global financial system
- Report regularly on progress made in preventing the malicious use of ICT in the financial system

Maurer, Tim and Steven Nyikos, "Toward A Global Norm Against Manipulating the Integrity of Financial Data," T20 Policy Brief, April 5, 2017 (http://www.g20-insights.org/policy_briefs/toward-global-norm-manipulating-integrity-financial-data/)

4 HARNESS THE POTENTIAL OF BLOCKCHAIN TECHNOLOGY AND RETHINK COMPETITION POLICY TO MAKE GLOBAL GOVERNANCE PROCESSES MORE INCLUSIVE AND ACCOUNTABLE

- Convene a research group to propose reforms to make international regulatory regimes such as the Basel agreements, the WTO or the Paris agreement on climate change more efficient, transparent and accountable.
- Establish a global regulatory sandbox for promising blockchain uses: financial services for currently underbanked populations, global supply chain integration for small- and medium-sized enterprises (SMEs), off-grid financing of clean energy, and digital identity and privacy management services.
- Constitute and fund a consortium of Central Banks to explore and evaluate the full panoply of blockchain-based global monetary system options.
- Create a World Competition Network to build an effective legal framework to enforce competition law in the presence of superstar digital firms.

Maupin, Julie, "The G20 Countries Should Engage with Blockchain Technologies to Build an Inclusive, Transparent, and Accountable Digital Economy for All," T20 Policy Brief, April 6, 2017 (http://www.g20-insights.org/policy_briefs/g20-countries-engage-blockchain-technologies-build-inclusive-transparent-accountable-digital-economy/)

Marin, Dalia, "Time to Rethink Competition Policy in the Digital Age," T20 Policy Brief, May 3, 2017 (http://www.g20-insights.org/policy_briefs/inclusive-globalization-digital-age-g20-implement-global-competition-authority-address-superstar-firms/)

BUILDING A STABLE, SUSTAINABLE AND RESILIENT, GLOBAL ECONOMY

Human wellbeing and shared prosperity build on a resilient, sustainable and fair global economic governance framework. While it remains important to reduce financial volatilities and avoid new trade barriers, returning to business-as-usual will not be sufficient. The comprehensive challenge of the G20 is to develop a global economic governance architecture that makes globalization inclusive and sustainable, providing a framework with which to achieve the 2030 Agenda. Crucially, more international cooperation is needed to help governments to mobilize domestic resources to deal with the adverse effects of economic globalization.

5 DEVELOP A NEW NARRATIVE VISION AND PRACTICAL POLICY AGENDA TO ADVANCE A MORE HUMAN-CENTERED MODEL OF ECONOMIC GROWTH AND DEVELOPMENT. AIMED AT ENSURING THAT THE TECHNOLOGICAL PROGRESS OF THE 21ST CENTURY AUGMENTS RATHER THAN SUBSTITUTES FOR HUMAN POTENTIAL AND EMPLOYMENT AROUND THE WORLD, THIS EFFORT WOULD PLACE PEOPLE AND THEIR LIVING STANDARDS AT THE HEART OF ECONOMIC POLICY BY SEEKING TO DESIGN SOCIAL INCLUSION MORE EXPLICITLY INTO:

- the normative context within which the advanced technologies of the Fourth Industrial Revolution develop and diffuse, through greater use of agile, informal governance processes of dialogue and feedback involving business, academic, civil society and governmental stakeholders;
- the central logic of national economic policy and international economic cooperation, by reconceptualising structural economic reform as an ongoing process of continuous improvement across 15 demand- and supply-side areas of structural policy and institutional strength, the combined effect of which is to diffuse opportunity, income, security and quality of life more widely as part of the growth process; and
- the enabling environment for human capital formation and labour markets, through a concerted process of modernization and increased investment across five areas: active labor market policies; equity of access to quality basic education; gender parity; non-standard work benefits and protections; and school-to-work transition.

Samans, Richard and Nicholas Davis, "Advancing Human-Centered Economic Progress in the Fourth Industrial Revolution," T20 Policy Vision, May 9, 2017 (http://www.g20-insights.org/policy_briefs/advancing-human-centred-economic-progress-fourth-industrial-revolution-leadership-agenda-g20-governments/)

PURSUE ECONOMIC POLICIES THAT SIMULTANEOUSLY IMPROVE ECONOMIC RESILIENCE (REDUCING THE RISK OF SEVERE RECESSIONS AND FINANCIAL CRISES) AND ENHANCE INCLUSIVENESS (REDUCING INEQUALITY).

- Develop further active labor market programs that promote inclusive growth and reduce the risk of severe crises.
- Identify global risks, drawing on the indicators of house price misalignments, global credit-to-GDP ratios, global equity price gaps and other indictors of international organizations such as the OECD, IMF and BIS, in order to reduce the incidence of crises and associated increases inequality.
- Design financial market prudential policies (such as those based on maximum debt-to-income ratios) that reduce incidence of severe recessions at no cost to trend growth.

Iwata, Kazumasa, Sébastien Jean, Christian Kastrop, Chris Loewald and Nicolas Véron, "Resilience and Inclusive Growth," T20 Policy Brief, May 16, 2017 (http://www.g20-insights.org/policy_briefs/resilience-inclusive-growth/)

IMPROVE THE RESILIENCE OF THE GLOBAL FINANCIAL AND MONETARY SYSTEM

- Establish a High-Level Expert Group to identify and remove inconsistencies across financial regulatory regimes.
- Create a task force to examine divergent and conflicting approaches in managing the dynamics of the international monetary system to avoid conflicts regarding currency manipulation, competitive monetary easing, macroprudential policies and ring fencing domestic banking and financial sectors.

Allen, Franklin, Jan Pieter Krahnen, Hélène Rey, "Financial Resilience Revisited: Why Consistency in Regulation is Now Paramount – Across Sectors and Regions, and Over Time," T20 Policy Brief, February 28, 2017 (http://www.g20-insights.org/policy_briefs/financial-resilience-revisited-consistency-regulation-now-paramount-across-sectors-regions-time/)

Dongming, Liu, Alfredo Gutierrez Girault, Miguel Otero-Iglesias, Fabrizio Saccomanni, José Siaba Serrate, "Beyond Financial Regulation: The Need for a Broader and More Coordinated Capital Flow Management Strategy," T20 Policy Brief, February 27, 2017 (http://www.g20-insights.org/policy_briefs/beyond-financial-regulation-need-broader-coordinated-capital-flow-management-strategy/)

6 SUPPORT THE ALIGNMENT OF THE TRADE AND INVESTMENT SYSTEM WITH THE 2030 AGENDA

- Establish a Global Pact for Sustainable Trade, to set minimum standards for environmental protection, labor conditions and human rights protection in global value chains.
- Call on WTO members to align rule-making and dispute settlement with sustainable development in line with the 2030 Agenda.
- Support the development of international procedural and transparency tax standards to seek to create trust between investors and tax authorities, overcome information asymmetries, determine mutual obligation and lower the costs of tax compliance and tax administration.
- Hold global dialogues on responsible investments and anti-corruption practices.

Berger, Axel, Johannes Blankenbach, Fernando Blumenschein, Clara Brandi, Uri Dadush, Philipp Harms, Isabel Jandeisek, Lise Johnson, Diego Navarro, Adriana Neligan, Joshua Wickerham, Josef Wieland, "Fostering the Sustainability of Global Value Chains (GVCs)," T20 Policy Brief, March 28, 2017 (http://www.g20-insights.org/policy_briefs/fostering-sustainability-global-value-chains-gvcs/)

Alexander, Nancy, Clara Brandi, Ram Upendra Das, Richard Klein, Jann Lay, Imme Scholz, Rainer Thiele, "Coherent G20 Policies Towards the 2030 Agenda for Sustainable Development," T20 Policy Brief, May 4, 2017 (http://www.g20-insights.org/policy_briefs/coherent-g20-policies-towards-2030-agenda-sustainable-development/)

Díaz de Sarralde, Santiago, Christian von Haldenwang, Tobias Hentze, Nara Monkam, "Tax Certainty," T20 Policy Brief, May 2, 2017 (http://www.g20-insights.org/policy_briefs/tax-certainty/)

Brosio, Magali, Paddy Carter, Mark Hallerberg, Song Hong, Martina Neuwirth, "Tax Expenditures", T20 Policy Brief, March 15, 2017 (http://www.g20-insights.org/policy_briefs/tax-expenditures/)

7 INITIATE A PARADIGM SHIFT IN THE RELATIONSHIPS BETWEEN G20 AND AFRICA AND INSTITUTIONALIZE COOPERATION ON GLOBAL SUSTAINABLE DEVELOPMENT

- Consider a full and permanent seat for the AU Commission in the G20 and its workstreams.
- Start deepening cooperation of the G20 with Africa with very specific initiatives (such as Base Erosion and Profit Shifting) where joint interests are strongest.
- Broadened the joint agenda between G20 and Africa step by step, considering African citizens' needs and preferences (www.afrobarometer.org).
- Link the "Compacts with Africa", which focus on private investments in infrastructure with the Hangzhou Summit's 2016 commitment to African industrialization and avoid a lock-in of unsustainable, high-carbon investments.

Gobbelaar, Neuma, Christine Hackenesch, Adolf Kloke-Lesch, Julia Leininger, Elizabeth Sidiropoulos, "G20 and Africa – Ready for a Steady Partnership?," T20 Policy Brief, May 16, 2017 (http://www.g20-insights.org/policy_briefs/g20-africa-ready-steady-partnership/)

Bratton, Michael, Emmanuel Gyimah-Boadi, Julia Leininger, "G20 and Africa: Sectoral policies and delivering on African citizens' demands", T20 Policy Brief, May 16, 2017 (http://www.g20-insights.org/policy_briefs/g20-africa-sectoral-policies-delivering-african-citizens-demands/)

Mutanga, Shingirirai, Rainer Quitzow, Jan Christoph Steckel, "The G20's role in improving quality of life through sustainable energy and urban infrastructure in Africa," T20 Policy Brief, April 10, 2017 (http://www.g20-insights.org/policy_briefs/g20s-role-improving-quality-life-sustainable-energy-urban-infrastructure-africa/)

CLIMATE POLICY AND FINANCE

In order to implement the Paris Climate Agreement, rapid action is urgently needed at the global level. The two degrees Celsius guardrail requires a decarbonization of the global economy by mid-century, 2070 at the latest. Fighting global warming is an investment in human development, in avoiding severe destabilizations of ecosystems on which human civilization build, in modernizing the global economy, in fighting inequalities and in ensuring peace and security.

8 PROMOTE THE LEVERAGING OF MARKET FORCES TO SUPPORT LOW-CARBON GROWTH

- Request that the Multilateral Development Banks (MDBs) set a system-wide target for supporting the scaling up of sustainable infrastructure as well as setting common definitions and standards for sustainable infrastructure.
- Invite the Financial Stability Board (FSB) to establish a platform to exchange experiences and develop approaches to disclosure on climate-related financial risks.
- Encourage MDBs, export financing institutions and private-sector financial institutions to adopt shadow carbon pricing in internal decision-making as an instrument to help reduce climate-related risk in their investment portfolio.
- Encourage MDBs to develop roadmaps for translating the Paris Climate Agreement into investment plans.
- Set 2022 as a target date for eliminating fossil fuel subsidies in G20 countries.
- Establish a platform for developing a roadmap to implement carbon pricing to double the level of emissions covered by carbon pricing mechanisms from current levels.
- Establish an Expert Advisory Commission to assist the G20's Energy Transformation Processes.
- Encourage the creation of specialized consumer solar finance intermediaries needed to create markets for solar products and encourage MDBs and global private capital to invest in these intermediaries.

Bak, Céline, Amar Bhattacharya, Ottmar Edenhofer, Brigitte Knopf, "Towards a Comprehensive Approach to Climate Policy, Sustainable Infrastructure, and Finance," T20 Policy Brief, March 16, 2017 (http://www.g20-insights.org/policy_briefs/towards-comprehensive-approach-climate-policy-sustainable-infrastructure-finance/)

Dao Nguyen, Thang, Ottmar Edenhofer, Gianluca Grimalda, Michael Jakob, David Klenert, Gregor Schwerhoff, Jan Siegmeier, "Policy Options for a Socially Balanced Climate Policy," T20 Policy Brief, March 13, 2017 (http://www.g20-insights.org/policy_briefs/policy-options-socially-balanced-climate-policy/)

Colombier, Michel, Yu Cong, Patrick Criqui, Christoph Frei, Carl Friedrich Gethmann, Philipp Großkurth, The Rt. Hon John Gummer, Lord Deben, Baroness Brown of Cambridge DBE FREng (Julia King), Franck Lecocq, Andreas Löschel, Jyoti Parikh, Dirk Uwe Sauer, Robert Schlögl, Christoph M. Schmidt, Frithjof Staiß, Cyril Stephanos, Kanako Tanaka, Eberhard Umbach, Matt Wenham, Du Xiangwan, Koichi Yamada, Tian Zhiyu, "Establishing an Expert Advisory Commission to Assist the G20's Energy Transformation Processes," T20 Policy Brief, April 10, 2017 (http://www.g20-insights.org/policy_briefs/establishing-expert-advisory-commission-assist-g20s-energy-transformation-processes/)

Samans, Richard and Nicholas Davis, "Advancing Human-Centered Economic Progress in the Fourth Industrial Revolution," T20 Vision Brief, May 9, 2017 (http://www.g20-insights.org/policy_briefs/advancing-human-centred-economic-progress-fourth-industrial-revolution-leadership-agenda-g20-governments/)

Bhandari, Amit, Akshay Mathur, Purvaja Modak,"A decentralized, consumer-driven model for the solar eco-system," T20 Policy Brief, April 7, 2017 (http://www.g20-insights.org/policy_briefs/decentralized-consumer-driven-model-solar-eco-system/)

ENCOURAGE THE ESTABLISHMENT OF TRANSFORMATIVE SOVEREIGN WEALTH FUNDS IN G20 COUNTRIES TO SUPPORT CLIMATE PROTECTION

- Use transformative sovereign wealth funds to leverage climate protection investments and support workers, regions and sectors in adjusting to structural change driven by decarbonization by adopting pro-active employment, training, and industrial policies.
- Use revenues from CO2 prices and emisions trading, as well as a generational component levied on estates, to generate the funds to combine climate protection and equity issues.

German Advisory Council on Global Change, "Development and Justice through Transformation: The Four Big 'I's", T20 Policy Brief, May 4, 2017 (http://www.g20-insights.org/policy_briefs/development-justice-transformation-four-big-2/)

9 PROMOTE THE COHERENT MANAGEMENT OF THE DISTRIBUTIONAL EFFECTS OF CLIMATE POLICY

- Monitor systematically the regressive impact of climate policies.
- Translate the "carbon dividend" (public revenues generated by carbon pricing) into reduced labor taxes for low-income households.
- Adopt active labor market policies to avoid negative employment effects due to decarbonization and improve skill transferability in other sectors.

Dao Nguyen, Thang, Ottmar Edenhofer, Gianluca Grimalda, Michael Jakob, David Klenert, Gregor Schwerhoff, Jan Siegmeier, "Policy Options for a Socially Balanced Climate Policy," T20 Policy Brief, March 13, 2017 (http://www.g20-insights.org/policy_briefs/policy-options-socially-balanced-climate-policy/)

German Advisory Council on Global Change, "Development and Justice through Transformation: The Four Big 'I's," T20 Vision Brief, May 4, 2017 (http://www.g20-insights.org/policy_briefs/development-justice-transformation-four-big-2/)

10 PROMOTE GREEN-TECHNOLOGY SMALL- AND MEDIUM-SIZED ENTERPRISES (SMES)

- Track the health of emerging green-technology firms as well as the resilience of financial institutions to climate stress-test scenarios.
- Promote systematic sharing of intellectual property databases seen not as "protection" but "signaling" of (green and sustainable) innovation.
- Use public funding to de-risk the scale-up of low-carbon innovation by SMEs.

Anbumozhi, Venkatachalam, Céline Bak, Joël Ruet, Elena Verdolini, "Innovative Green-Technology SMEs as an Opportunity to Promote Financial De-Risking," T20 Policy Brief, May 8, 2017 (http://www.g20-insights.org/policy_briefs/innovative-green-technology-smes-opportunity-promote-financial-de-risking/)

11 STANDARDIZE GREEN FINANCE PRACTICES

- Promote green finance principles, indicators and reporting procedures.
- Develop green bond rating criteria and a monitoring system for assessing the implementation of green principles.
- Mandate the FSB to develop an adequate regulatory framework for green finance.
- Promote disclosure guidelines for environmental risks and related financial risks.

Alloisio, Isabella, Céline Bak, Kathrin Berensmann, Amar Bhattacharya, Gerd Leipold, Lawrence MacDonald, Qingqing Yang, Hannah Schindler, Tian Huifang, Ulrich Volz, "Fostering Sustainable Global Growth through Green Finance – What Role for the G20?," T20 Policy Brief, May 5, 2017 (http://www.g20-insights.org/policy_briefs/fostering-sustainable-global-growth-green-finance-role-g20/)

FIGHTING HUNGER, REDUCING INEQUALITIES, MANAGING FORCED MIGRATION

As globalization drives global growth and prosperity, the number of poor people has been shrinking globally over the past two decades and a new global middle class is emerging. However, globalization and market forces do not automatically translate into balanced and inclusive development or shared prosperity. Multiple inequalities are rising in many countries, destabilizing entire political systems. The number of refugees, most of them living in developing countries, is on the rise. Local, national and global governance is needed to fight hunger and inequalities, to avoid the exclusion of vulnerable people, and to support regions, cities and economic sectors in adjusting to rapidly changing environments in the global economy. The G20 should contribute toward fighting inequalities and working for shared prosperity nationally and globally.

12 RESHAPE THE GLOBAL FOOD SYSTEM THROUGH AN INTEGRATED APPROACH TO NEEDS, RESOURCES AND POLICIES, TRIGGERING BETTER TARGETED INVESTMENTS

- Deploy financial resources of G20 countries for food and nutrition security more effectively.
- Acknowledge that targeting infant and child undernutrition, as well as biofortification, can have important impacts on health and future labor productivity.
- Secure long-term and predictable sources of investment for food and nutrition to mitigate food aid volatility.

Gulati, Ashok, Homi Kharas, Joachim von Braun, "Targeting G20 Investments in Agriculture to End Rural Hunger," T20 Policy Brief, February 20, 2017 (http://www.g20-insights.org/policy_briefs/targeting-g20-investments-agriculture-end-rural-hunger/)

- Address the famine situation in Africa and Yemen, assuring adequate and timely financing for food aid and linking famine relief to resolute action to assure access to affected populations.

Abu-Nimer, Mohammed, Cole Durham, Manoj Kurian, Katherine Marshall, Ulrich Nitschke, Rabbi Awraham Soetendorp, Arnhild Spence, "Engaging religious actors in addressing the famineemergency in South Sudan, Nigeria, Somalia, and Yemen," T20 Policy Vision, May 10, 2017 (http://www.g20-insights.org/policy_briefs/engaging-religious-actors-addressing-famine-emergency-south-sudan-nigeria-somalia-yemen/)

13 PROMOTE POLICIES TO MAKE WATER USE SUSTAINABLE

- Focus land and water resource policies on human wellbeing, in terms of food safety, health and hygiene, by separating the water systems as much as possible from people's living environments.
- Increase economic water use efficiency in agriculture through domestic policy reforms, supporting and sharing sound energy technologies and strengthening the existing international agreements beyond mere voluntary guidelines.
- Use digital opportunities for sustainable agriculture by establishing food and agriculture related ICT platforms, implementing regulatory frameworks to support such innovations that can improve resilience of farmers, and backing improved metrics and open data for political decision-making.
- Redesign global governance of agriculture and food by collaborating to establish sound and transparent international standards for a sustainable bioeconomy and by insisting that international trade and investment agreements by the G20 countries explicitly factor in the potential positive and negative trade related impacts on sustainable land and water use.
- Set up an International Panel on Food, Nutrition and Agriculture – partly following the design of the IPCC – to redesign global food and agriculture governance and consolidate the myriad of panels and fragmented global knowledge.

Gulati, Ashok, Homi Kharas, Joachim von Braun, "Key Policy Actions for Sustainable Land and Water Use to Serve People," T20 Policy Brief, January 16, 2017 (http://www.g20-insights.org/policy_briefs/key-policy-actions-sustainable-land-water-use-serve-people/)

14 DEVELOP AND REPORT ON ROADMAPS TO INCLUSIVE GROWTH ON NATIONAL LEVELS, FOLLOWING THE ALREADY EXISTING BUILDING BLOCKS ON INCLUSIVE GROWTH POLICIES OF THE OECD (2017)

Boarini, Romina, Orsetta Causa, Marc Fleurbaey, Gianluca Grimalda, Ingrid Woolard, "Reducing Inequalities and Strengthening Social Cohesion through Inclusive Growth: A Roadmap for Action," T20 Policy Brief, April 12, 2017 (http://www.g20-insights.org/policy_briefs/reducing-inequalities-strengthening-social-cohesion-inclusive-growth-roadmap-action/)

15 MOVE TOWARDS A PISA-TYPE RANKING ON INEQUALITY

- Publish a periodical report that would rank countries by their performance in terms of economic equality.
- Create a research and policy forum to facilitate mutual learning about inequality reduction policies.

Chancel, Lucas, Alex Hough, Tancréde Voituriez, "Towards a PISA-Type Ranking on Economic Inequality," T20 Policy Brief, March 22, 2017 (http://www.g20-insights.org/policy_briefs/towards-pisa-type-ranking-economic-inequality/)

16 PROMOTE THE INTEGRATION OF FORCED MIGRANTS INTO NATIONAL LABOR MARKETS THROUGH THE CREATION OF SPECIAL ECONOMIC ZONES AND WORK VISAS

- Mobilize the private sector to develop sustainable solutions for the global refugee crisis and endorse the establishment of Made by Refugees Special Economic Zones ("MBR Zones") in refugee hosting countries.
- Promote refugee entrepreneurship through fast-tracked work visas, entrepreneur visas and special startup visa programs.

Kadkoy, Omar, Timur Kaymaz, Murat Kenanoğlu, Güven Sak, "Forced Migrants: Labour Market Integration and Entrepreneurship," T20 Policy Brief, April 6, 2017 (http://www.g20-insights.org/policy_briefs/forced-migrants-labour-market-integration-entrepreneurship/)

17 HELP THE TRANSITION FROM HUMANITARIAN AID TO SUSTAINABLE DEVELOPMENT OF EDUCATIONAL INFRASTRUCTURE

- Set up regular meetings of education ministers to focus on educational services for refugees.
- Encourage international organizations and national governments to provide ways to recognize prior teaching qualifications of refugees.

Bislimi, Faton, Kenan Engin, Jaya Josie, Timur Kaymaz, Ismael Nouns, Barbara Sabitzer, Astrid Skala-Kuhmann, Konosoang Sobane, Daniel Taras, Vladimir Zuev, "Education and Skills Development in the Context of Forced Migration," T20 Policy Brief, March 3, 2017 (http://www.g20-insights.org/policy_briefs/education-skills-development-context-forced-migration/)

ESTABLISH A COMMISSION, WITH THE PARTICIPATION OF RELIGIOUS LEADERS, TO REDESIGN THE UNHCR SYSTEM TO MAKE IT A TRULY GLOBAL SYSTEM

- Enhance systematic mechanisms to assure cooperation and joint advocacy among religiously active communities and public authorities, at G20 level as well as EU and national government.
- Support programs of religious organizations and actors that strengthen the resilience of displaced communities.

Casey, Shaun, Attalah Fitzgibbon, Azza Karam, Majbritt Lyck-Bowen, Katherine Marshall, Ulrich Nitschke, Mark Owen, Isabel Phiri, Alberto Quatrucci, Rabbi Awraham Soetendorp, Msgr. Robert Vitillo, "G20 policy makers should support wider religious roles in refugee resettlement," T20 Policy Vision, May 10, 2017 (http://www.g20-insights.org/policy_briefs/g20-policy-makers-support-wider-religious-roles-refugee-resettlement/)

PROMOTE THE INCLUSION OF REFUGEE CHILDREN AND YOUTH INTO NATIONAL EDUCATION SYSTEMS

- Support the harmonization of education systems worldwide.
- Support the development of internationally recognized accreditation mechanisms for informal education providers to allow quality educational interventions right at the onset of forced migration crises.
- Enhance international efforts to develop accredited non-formal education, providing accelerated learning opportunities for youth who are not eligible for formal schooling.

Kadkoy, Omar, Timur Kaymaz, Murat Kenanoğlu, Güven Sak, "Forced Migrants: Labour Market Integration and Entrepreneurship," T20 Policy Brief, April 6, 2017 (http://www.g20-insights.org/policy_briefs/forced-migrants-labour-market-integration-entrepreneurship/)

18 SUPPORT LOW- AND-MIDDLE-INCOME COUNTRIES THAT HOST REFUGEES

- Initiate a broad effort by multilateral and bilateral donors to rigorously evaluate country experiences, identify best practices for policy interventions and provide additional development assistance as needed.
- Engage, jointly with the donor community, host countries in a "partnership for refugees" that involves firm and predictable commitments for assistance to host countries over the medium and long term to match efforts by host countries to facilitate the formal social and economic inclusion of refugees.

Luecke, Matthias and Claas Schneiderheinze, "More Financial Burden-Sharing for Developing Countries that Host Refugees," T20 Policy Brief, April 6, 2017 (http://www.g20-insights.org/policy_briefs/financial-burden-sharing-developing-countries-host-refugees/)

Khasru, Syed Munir, Kazi Mitul Mahmud, Avia Nahreen, "The G20 Countries Should Assume Leadership of the Forced Migration Crisis and Mitigate the Deficiencies of the Existing Governance System," T20 Policy Brief, May 5, 2017 (http://www.g20-insights.org/policy_briefs/g20-countries-assume-leadership-forced-migration-crisis-mitigate-deficiencies-existing-governance-system/)

19 PROMOTE POLICIES TO SUPPORT "CLIMATE MIGRANTS"

- Call on relevant international organizations to submit (joint) annual reports to the G20 on the dynamics of global environmental change and the temporary, protracted or permanent displacement of people.
- Promote long-term efforts to help "climate migrants" to make new homes and integrate into the communities of their locality, region or country of destination.

Axworthy, Lloyd, Cristina Cattaneo,Romy Chevallier, Shiloh Fetzek, Rajat Kathuria, SyedMunir Khasru, Andreas Kraemer, Katriona McGlade, Shingirirai Mutanga, Nedson Pophiwa, Aarsi Sagar, Benjamin Schraven, Patrick Toussaint, Scott Vaughan, Emily Wilkinson, "Building Global Governance for 'Climate Refugees'," T20 Policy Brief, May 8, 2017 (http://www.g20-insights.org/policy_briefs/building-global-governance-climate-refugees/)

THE 2030 AGENDA – A UNIVERSAL FRAMEWORK FOR HUMAN DEVELOPMENT AND SHARED PROSPERITY WITHIN PLANETARY BOUNDARIES

The 2030 Agenda is about promoting human wellbeing, growth and prosperity, in an inclusive way that is possible within the planetary boundaries. The 2030 Agenda and its Sustainable Development Goals (SDGs) are universal. The 2030 Agenda requires effective governance at local and national levels, and a culture of global cooperation to protect the global commons and to support vulnerable people worldwide. The 2030 Agenda can provide an overarching vision for the G20.

20 STRONGLY RENEW THE G20 COMMITMENT TO THE IMPLEMENTATION OF THE 2030 AGENDA AND STRESS THE KEY ROLE OF THE MULTILATERAL SYSTEM IN ITS IMPLEMENTATION

- Endorse the 2030 Agenda as the overarching framework of the G20, considered in the work of all the G20 Working Groups.
- Over the next years, develop – supported by the T20 – a roadmap for the implementation of core SDGs by G20 in the policy path towards 2030.
- Establish within the Development Working Group (DWG) a five year process on the 2030 Agenda, in order to engage in own work and in discussion with other work streams and Engagement Groups with a view to identify and fill gaps left by existing G20 frameworks and initiatives when implementing the 2030 Agenda. Draw on global religious and secular ethical leaders to develop a shared moral consensus on the challenges of sustainable development, and to convert this consensus into practical action.
- Start a dialogue with the MDBs on the adoption of SDG-related standards and policies by these institutions.
- Support the ongoing debate on profound transformation of the UN Development System, to make it fit for implementing the 2030 Agenda.
- Initiate a dialogue on how to build the SDGs into the WTO framework.
- Lead global cooperation through both protection and restoration measures for coastal and marine ecosystems and a careful approach to sustainable exploitation of marine resources.

Anbumozhi, Venkatachalam, Paulo Esteves, Imme Scholz, Yuefen Li, "Reforming International Cooperation Towards Transformative Change," T20 Policy Brief, May 4, 2017 (http://www.g20-insights.org/policy_briefs/reforming-international-cooperation-towards-transformative-change/)

Alexander, Nancy, Clara Brandi, Ram Upendra Das, Richard Klein, Jann Lay, Imme Scholz, Rainer Thiele, "Coherent G20 Policies Towards the 2030 Agenda for Sustainable Development," T20 Policy Brief, May 4, 2017 (http://www.g20-insights.org/policy_briefs/coherent-g20-policies-towards-2030-agenda-sustainable-development/)

Akman, M. Sait, Axel Berger, Uri Dadush, Simon Evenett, Lise Johnson, Maximiliano Mendez-Parra, Raul Ochoa, Claudia Schmucker, "Key policy options for the G20 in 2017 to support an open and inclusive trade and investment system", T20 Policy Brief, March 31, 2017 (http://www.g20-insights.org/policy_briefs/key-policy-options-g20-2017-support-open-inclusive-trade-investment-system/)

Annett, Anthony, Jeffrey Sachs, Bishop Marcelo Sanchez Sorondo, William Vendley, "A Multi-Religious Consensus on the Ethics of Sustainable Development: Reflections of the Ethics in Action Initiative," T20 Policy Brief, May 9, 2017 (http://www.g20-insights.org/policy_briefs/multi-religious-consensus-ethics-sustainable-development-reflections-ethics-action-initiative/)

Dongxiao, Chen, Paulo Esteves, Edna Martinez, Imme Scholz, "Implementation of the 2030 Agenda by G20 members: How to Address theTransformative and Integrated Character of the SDGs by Individual and Collective Action," T20 Policy Brief, February 20, 2017 (http://www.g20-insights.org/policy_briefs/implementation-2030-agenda-g20-members-address-transformative-integrated-character-sdgs-individual-collective-action/)

Schmidt, Stephanie, Alexander Müller, Julien Rochette, Jane Lubchenko, Barbara Neumann, Andreas Kraemer, Torsten Thiele, Sebastian Unger and Martin Visbeck, "The Ocean Dimension of the 2030 Agenda," Policy Brief, May 4, 2017 (http://www.g20-insights.org/policy_briefs/ocean-dimension-2030-agenda-conservation-sustainable-use-ocean-seas-marine-resources-sustainable-development/)

INSTALL A G20 ENGAGEMENT GROUP DEDICATED TO CITIES AS IMPLEMENTERS OF THE 2030 AGENDA, FOCUSING ON POLITICAL LEVERAGE, INSTITUTIONAL CAPACITY BUILDING AND FINANCIAL AUTONOMY

Contardi, Marco, Anja Eickelberg Fortes Tigre, Kathrin Zeller, "Making Cities Part of the Global Solution – Overcoming Obstacles, Exploring Opportunities," T20 Policy Brief, May 5, 2017 (http://www.g20-insights.org/policy_briefs/making-cities-part-global-solution-overcoming-obstacles-exploring-opportunities/)

CONCLUDING REMARKS

It is a widely-held belief that the current process of globalization and economic growth is unsustainable, unfair and unstable. There is ample evidence that, once people's basic material needs have been satisfied, the single-minded pursuit of further material wealth leads to little improvement in life satisfaction. The G20's vision must reveal pathways that respect planetary boundaries. These pathways must satisfy not only people's material needs, but must also be empowering. People must be empowered to contribute to their own communities and to the common global good. Empowered individuals can contribute to common causes, such as stopping climate change and reversing resource depletion. They must become empowered to satisfy their basic needs for good material livelihoods, security, social affiliation and achievement. The 2030 Agenda and its Sustainable Development Goals, interpreted by former German President Horst Köhler as a "Declaration of Interdependence," reflect a basic groundwork for such an approach. In building, developing, and implementing such a vision, the G20 has the opportunity to set the foundation for a peaceful and promising future.

Dirk Messner
Director
German Development Institute /
Deutsches Institut
für Entwicklungspolitik

Dennis J. Snower
President
Kiel Institute for the World Economy /
Institut für Weltwirtschaft

© T20 Germany, 2017

Kiel Institute for the World Economy (IfW) Kielline 66
24105 Kiel | Germany Tel +49 431 8814-0 | www.ifw-kiel.de

German Development Institute /
Deutsches Institut für Entwicklungspolitik (DIE)
Tulpenfeld 6 | 53113 Bonn | Germany Tel +49 228 94927-0
www.die-gdi.de

www.t20germany.org
#t20germany

Layout and Setting:
Verlag Der Tagesspiegel GmbH
Askanischer Platz 3 | 10963 Berlin | Germany

Picture:
Cover: © sdecoret – fotolia