Striving for Sustainability in Infrastructure Development – Lessons from the Economic Policy Forum (EPF)

Dr. Astrid Skala-Kuhmann, Special Advisor to the Board – G20, Director, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Berlin **Antje Uhlig**, Co-Director, Economic Policy Forum (EPF), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Berlin

Abstract

G20 leaders have regularly emphasized the importance of infrastructure, underlining that the central challenge is the need to unlock more capital. However, the G20 has not so far taken the lead in incorporating climate risks and sustainable development factors into its infrastructure investment strategies. This paper ¹ offers suggestions on how these issues could be taken forward in the coming year under China's G20 presidency, combining growth strategies with sustainable development objectives within the G20 infrastructure initiatives. China will have a unique opportunity on the cusp of the UN Agenda 2030 for Sustainable Development, both to capitalize on its endeavours to transform its own growth model, and to take the lead in the G20 for concrete steps towards implementing the SDGs in G20 countries and beyond. The paper presents some of the key findings from a recent seminar held by the Economic Policy Forum (EPF) on the issue ², before concluding with considerations and proposals as to how these could be taken up within the T20 Engagement Group and other relevant G20 work streams. Policy coordination and concerted action between the different G20 work streams, in particular the Development Working Group, the Investment and Infrastructure Working Group and the envisaged Green Finance Working Group will be key to combining quantity and quality growth in infrastructure approaches. Think tank platforms like the Think20, the Silk Road Think Tank Network (SiLKS) and the Economic Policy Forum (EPF) have a critical role to play in galvanizing the ideas, concepts and policy options needed to initiate the necessary paradigm shift towards sustainable infrastructure development.

¹ This is an opinion paper based on the authors' participation in the 2015 T20 deliberations and the engagement with a variety of stakeholder groups under the framework of the EPF.

² EPF Think Week on "Sustainable Infrastructure Development – Challenges and Opportunities for Emerging Economies," see report and working papers on https://www.economic-policyforum.org/event/epf-think-week-2015/.

Introduction

Infrastructure is widely considered to be a common challenge for global development, with lack of finance often identified as the main bottleneck. ³ Infrastructure is also deemed an essential component of economic development, poverty reduction and prosperity, especially in low and middle income countries. An inadequate supply of transport, water and energy networks, a lack of basic health and sanitation infrastructure, and unsatisfactory communications networks all affect the well-being of millions of people. Policy-makers and experts have repeatedly pointed to the persistently low rates of infrastructure investment: total annual investment needs are estimated to amount to 3.7 trillion USD globally, leaving an infrastructure investment gap of roughly one trillion USD a year. ⁴ In Asia alone, infrastructure costs are estimated to total \$8 trillion by 2020. 5

However, such quantitative projections appear to be of only limited value. Most importantly, they perpetuate the traditional economic models based on investment-driven solutions, and neglect the critical need to define sustainable development pathways that include parameters of human well-being and climate alongside GDP growth figures. The challenge is far from simply being a matter of lack of funding. What is really needed is a new sustainability paradigm for infrastructure development projects, which should encompass (1) economic viability, contributing to economic growth and job creation as well as being fiscally viable, (2) environmental protection, maintaining the integrity of eco-systems, using resources efficiently and ensuring low-carbon, climate-resilient construction and operation processes, and (3) social inclusiveness, contributing to poverty alleviation and targeting the needs of the population. Top-down mega investments that are liable to turn into white elephants need to be replaced by integrated, demand-driven approaches that strengthen communities and link them sensibly to social services and inter-regional economic corridors, and that also endeavour to use and maintain existing infrastructure more effectively. 6

The fact that at least five of the 17 SDGs are directly linked to the provision of key infrastructure ⁷ underscores the key role played by infrastructure in achieving sustainable development. SDG9 specifically calls for action to "build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation." 8

³ Callaghan & Strube (2014).

⁸ UN (2015).

⁴ WEF (2014). ⁵ ADB (2013).

⁶ See also Bhattacharya et al. (2015:5), G20 DWG (2014:3).

⁷ These are SDG6 pertaining to water and sanitation, SDG7 pertaining to energy access, SDG8 pertaining to employment and decent work, SDG9 pertaining specifically to resilient infrastructure, SDG11 pertaining to sustainable urban development.

Infrastructure Development within the G20 and under China's 2016 Presidency

Infrastructure is not a new priority for the G20. Since the Seoul Summit in 2010, G20 leaders have emphasized their commitment to increasing infrastructure investments, stressing the importance for economic development, poverty reduction and job creation. 9 In 2014 the Australian presidency reaffirmed that infrastructure must be a priority, and initiated the G20 Investment and Infrastructure Working Group (IIWG), which is directly linked to the Finance Ministers/G20 Finance Track. In the same year, the G20 launched a multi-year programme "to support public and private investment in quality infrastructure," 10 with the Global Infrastructure Hub constituting the primary means to enhance knowledge-sharing on infrastructure projects worldwide, to intensify cooperation with the private sector and close data gaps for investors, and to support capacity-building for officials in national and international public institutions. ¹¹ However, the initiative has once again focussed primarily on unlocking capital with a view to closing the perceived infrastructure investment gap. Such aspects as project quality or the selection of projects in line with parameters like resource efficiency, climate-resilience and social benefit have so far been given only cursory attention. ¹² The Global Investment Hub's business plan refers to sustainability as follows: "... it is important for the Hub to improve collaboration between the private sector and the G20 on infrastructure investment, including investment with a sustainability focus." 13 This is indicative of the standing currently accorded to sustainability: rather than being considered a factor inherent to any infrastructure project, it continues to be regarded as a specific, separate category of infrastructure, and one that remains undefined. Under the Turkish G20 presidency, the focus of the discussions on infrastructure was again devoted to financing issues.14

In view of China's strong commitment to the SDGs, its presidency in 2016 could come to be a game changer in setting the G20's infrastructure agenda. The country has demonstrated a willingness to reshape its domestic economic policies towards service-driven quality of growth, low carbon strategies and green innovation. Moreover, China's recently launched Belt and Road Initiative projects an ambitious vision designed to link up today's

_

⁹ Callaghan & Strube (2014).

¹⁰ G20 (2014).

¹¹ For more information please see: http://globalinfrastructurehub.org

¹² See also Bhattacharya et al. (2015:14), Callaghan & Strube (2014:6).

¹³ GIH (2015).

¹⁴ In 2015, the OECD submitted two substantial reports to Finance Ministers and Central Bank Governors, and to the IIWG that stressed the need for quality and sustainability alongside quantity of infrastructure development. The reports focus on "Official Development Finance for Infrastructure. Support by Multilateral and Bilateral Development Partners" and "Mapping of Instruments and Incentives for Infrastructure Financing: A Taxonomy" (OECD 2015a,b). The IIWG met three times in 2015 in Ankara, Singapore and Berlin, defining priorities and deliverables under the 2015 investment narrative. See also http://g20.org.tr/third-meeting-of-the-g20-investment-and-infrastructure-working-group-held-in-berlin/

decoupled regions and communities along the ancient Silk Road between China and Europe and beyond. The challenge for China – and the sixty countries meanwhile associated with the initiative – will be *not* to pursue the traditional GDP growth and investment-driven strategies but instead to grasp the opportunity to fundamentally reshape the discourse and concepts governing infrastructure development, with a view to incorporating climate risk and sustainability factors at their core. This will also have to involve a major effort to achieve cross-border coordination of mechanisms and policy frameworks so as to implement and monitor sustainability standards. The G20 is the right forum to spearhead such a cross-border approach.

What is needed within the G20, then, is a much more dedicated effort to link up the discourses on economic growth and financial reform, on sustainable development, and on climate action. A working model needs to be developed that squarely reflects the interdependence of these agendas and that produces coordinated responses. As Bhattacharya, Oppenheim and Stern put it, "growth strategies that fail to tackle poverty and/or climate change will proves to be unsustainable, and vice versa. Yet at present these agendas often operate in parallel universes." ¹⁵ A dysfunctional financial sector which fails to gather the investments needed for development and/or which reinforces high-carbon economic lock-ins adds another component to the equation.

China's plans to establish a Green Finance Working Group during its G20 presidency signals an encouraging willingness to link finance and investment to the sustainability and climate agendas. A set of standards for green bonds would be an important G20 deliverable for 2016. However, what is needed on top of this is improved policy coordination and a determined effort to ensure coherence with which the sustainability agenda dovetails into the different G20 work streams: sustainable solutions for infrastructure development are contingent on the G20 Investment and Infrastructure Working Group, the Development Working Group and the Green Finance Working Group being aligned.

Lessons from the Economic Policy Forum (EPF)

The analytical and technical support provided by relevant think tanks, economists and policy analysts will be vital in promoting the proposed paradigm shift. In their capacity as independent *ideas banks*, they have a special role to play in inviting the private sector, governments and financial institutions into an arena in which sustainability definitions, criteria, standards and measurement tools that are as yet still blurred can be discussed and developed further. The Silk Road Think Tank Network (SiLKS) launched in 2015 and so far

¹⁵ Bhattacharya et al. (2015:1).

involving 43 think tanks from 27 countries ¹⁶, constitutes a highly commendable initiative by Chinese think tanks to actively exchange knowledge and inspire new ideas. ¹⁷ It will be important to see this network produce concrete results, both at the level of concepts and ideas and at the level of ensuring that policy options are subjected to empirical analysis and evaluation. It would also be important to link this initiative to the Think20 process and to incorporate and capitalize on similar initiatives that already exist. One example for such a constructive, results-oriented exchange is the Economic Policy Forum (EPF), ¹⁸ a network that is today made up of over 30 think tanks from emerging and industrialized regions and whose members work jointly on socio-economic challenges, with a clearly defined focus on driving sustainability discourses and transitions both within their own countries and internationally. Sustainable infrastructure development has recently been launched as one of the EPF policy initiatives that is to be pursued over the coming years, with the objective of supporting effective, sustainable infrastructure policy-making in emerging economies. Some of the key initial findings from this initiative, based on the kick-off workshop held in Beijing in November 2015, are set out below, concluding with the implications and recommendations that pertain specifically to the G20.

First, reflecting on the critical need for a concerted effort of the public and private sectors, the discussions in Beijing reaffirmed the notion that national and multinational development finance institutions should play a much more prominent role. Beyond the provision of funding, they must use their reputation and their leverage to champion the definition and implementation of sustainability standards and thus to raise the bar for other investors within regions and countries. Moreover, they could play a far more influential role in providing support and know-how to both the public and the private sector in all aspects of project management, oversight and monitoring: this would reduce the high perceived risks associated with such projects, ¹⁹ and thus lead to the crowding in of other investments. The challenge is to build up the necessary technical capabilities within those institutions that will enable them to fulfil such a mission, and to put in place leaner, more flexible implementation mechanisms and procedures to cater to the tasks. ²⁰ Most importantly, however, in view of the proliferation that we have seen in the number of Multilateral Development Banks (MDBs), effective cooperation between these institutions needs to be ensured. If MDBs agree to prioritize sustainability, this will send an important signal that a paradigm shift in the sector is

¹ Bhattacharya et al. (2015:6,19).

¹⁶ China Daily (2015).

¹⁷ China.org.cn (2015).

¹⁸ Supported by the German Ministry for Economic Cooperation and Development (BMZ). See also www.economic-policy-forum.org.

¹⁹ On the high risks associated with infrastructure development and de-risking options, see Schmidt (2015).

being supported. The China-led Asian Infrastructure Investment Bank (AIIB) could pioneer and support changes to this end. 21

Secondly and intimately connected to this, there is the question of conditionality in the financing of infrastructure projects. In the past, China in particular was reluctant to impose conditions on its outward foreign investments. ²² However, this approach has recently been changing in response to instances where, with hindsight, precautionary safeguards would have proven to be indispensable in avoiding huge financial losses, commercial disruption and damage to China's image as a foreign donor and investor. Signals such as that communicated by the China International Contractors Association (CHINCA) 23 which adopted guidelines on social responsibility in 2010, and the adoption of similar guidelines for Chinese Outbound Mining Investments by the China Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters (CCCMC) ²⁴ in 2014, are promising. They need to be further encouraged and extended to environmental safeguards.

Thirdly, the EPF roundtable in Beijing showed that there is already an abundance of knowledge on how sustainability can be evaluated, with the Envision Rating System developed by Harvard University's Zofnass Program for Sustainable Infrastructure constituting just one proposal that warrants more widespread attention and application. ²⁵ Although there is as yet no single definition of sustainability, if we compare this approach to others, for example that presented by the Centro de Investigación para el Desarrollo A.C. (CIDAC) in Mexico ²⁶, or that proposed by Systainalytics in Singapore ²⁷, HDC Inc. in the U.S.²⁸, or, indeed, the commitments made in 2014 by the heads of the MDBs and the IMF ²⁹. we find that there is a discernible convergence in the criteria that different stakeholders regard as being of key importance in defining sustainability. Such evaluation and rating systems are invaluable in pushing up the benchmark of standards. However, the missing link

²¹ Recent remarks by AIIB's president-designate Jin Ligun to the effect that he would "run a 'clean, lean and green' institution [...] and abide by the toughest environmental and social standards in its lending" ²¹ have raised international expectations. Donnan & Sevastopulo (2015).

²² Wentworth and Makokera (2015:4) argue that such zero-interest concessional loans to African governments to fund Chinese construction of large infrastructure assets has established a new model for infrastructure development on the continent.

²³ Chinese trade association with more than 1,500 members. For more information see: https://www.economic-policy-forum.org/wp-content/uploads/2015/09/Session-2-Zhang-Xiang-PPT-

CHINCAs-Role-in-Sustainable-Infrastructure-Development-Think-Week2015.pdf
²⁴ These were developed within the framework of the Emerging Market Multinationals Network (EMM) for Sustainability, a sister network of EPF. See: https://www.emm-network.org/case_study/cccmcdeveloping-guidelines-for-social-responsibility-in-outbound-mining-investment/

²⁵ ISI (2015).

²⁶ Ramirez (2015).

²⁷ See: https://www.economic-policy-forum.org/wp-content/uploads/2015/09/Session-4-Hardik-PPT-Quantifying-the-Sustainability-of-Infrastructure-Project-ThinkWeek2015.pdf

²⁸ See: https://www.economic-policy-forum.org/wp-content/uploads/2015/09/Session-4-Behr-PPT-Sustainable-Return-on-Investment-Process-ThinkWeek2015.pdf ²⁹ World Bank (2014).

seems to be the issue of how these criteria translate into actual corporate practice and public policy processes. Thus, much more work needs to be done to quantify sustainability and to ensure that it is included as a measurable return on investment in a company's balance sheet or any project business plan.

In collaboration with its affiliated networks of multinational companies and financial institutions within the Emerging Market Sustainability Dialogues (EMSD), ³⁰ EPF will venture further into some of the above-mentioned complexities. It will identify local infrastructure development champions in order to explore in more depth the potential benefits that can be gleaned from MDBs taking a coordinated approach in different countries and sectors; it will develop a proposal for a definition of sustainability that would serve a variety of different stakeholders; it will work on a framework for quantifying the contribution made by sustainable infrastructure to both economic and social GDP; and it will analyse the experience gained in various emerging economies on how sustainability guidelines can be translated into actual corporate and policy processes, through the development of proposals for green public procurement and public-private partnership models. In order to "... raise the[se] big questions in the corridors of power ...," ³¹ however, it will be important to link EPF initiatives to the activities of other networks, most notably the Think20 and SiLKS.

³¹ Rajni (2015).

_

³⁰ EMSD comprises three interconnected platforms of (1) think tanks, (2) multinational corporations and (3) financial institutions: The Economic Policy Forum (EPF), the Emerging Market Multinationals Network (EMM) for Sustainability, and the Emerging Market Dialogue on Finance (EMDF). See: www.emsdialogues.org.

Conclusion

The G20's current narrative needs to shift from the infrastructure investment gap and financing issues to a more holistic approach that incorporates sustainability in the cost-benefit assessment of any infrastructure project. Such a paradigm shift involves many complex issues and questions, some of which have been presented above. It remains clear, however, that unless and until some of the fundamental lock-ins that prevail in our economic system are broken up, it will be hard to tackle them. The need to phase out fossil fuel subsidies and to establish a functioning international carbon market, for example, has been reiterated for quite some time. However, bold moves such as that taken by the insurance provider *Allianz*, which last month declared it would terminate all of its investments in mining companies and energy providers that generate more than 30 percent of their turnover or energy production from coal, are still too few. ³² It is important for the G20 as the premier forum for international economic cooperation to take the lead in pushing to remove such lock-ins.

China's announcement that it intends to focus on promoting green finance instruments and standards during its G20 presidency is an overdue initiative. It could turn out to be a first step to transform the current infrastructure and financing models into a quality growth approach. It will be important to build bridges between the green finance initiative and other G20 work streams, notably the Development Working Group and the Infrastructure Investment Working Group. G20 leadership in implementing the global climate and development agendas will require such a concerted effort to ensure policy coordination, effectively linking the SDGs to finance and infrastructure strategies. As an independent *ideas bank*, the Think20 is in a unique position to lead a multi-stakeholder process with a view to promoting integrated approaches to sustainable infrastructure development and finance. It should endeavour to capitalize on the leverage and experiences of other established networks such as EPF or SiLKS.

-

³² These investments will instead go to the wind energy sector. *Allianz* is one of the five biggest financial institutions, with most of its assets being in pension funds (Spiegel Online 2015).

References

Asian Development Bank (2013) Who Will Pay for Asia's \$8 Trillion Infrastrucuter Gap? Retrieved from: http://www.adb.org/news/infographics/who-will-pay-asias-8-trillion-infrastructure-gap [04/12/2015].

Bakshi, R. (2015) *Creating Sustainable Infrastructure*. Mumbai: Gateway House Retrieved from: http://www.gatewayhouse.in/creating-sustainable-infrastructure/ [04/12/2015].

Bhattacharya, A., J. Oppenheim & N. Stern (2015) *Driving Sustainable Development Through Better Infrastructure: Key Elements of a Transformation Program.* Global Economy & Development Working Paper 91. Washington DC: The Brookings Institution.

Callaghan, M. & D. Strube (2014) *G20 and Infrastructure, Submission on behalf of Think20 to the G20 Investment and Infrastructure Working Group Meeting, 4 June 2014.* Sydney: Lowy Institute.

China Daily (2015) *Declaration of SiLKS*. Retrieved from: http://www.chinadaily.com.cn/cndy/2015-10/30/content_22313367.htm [07/12/2015].

China.org.cn (2015) *Improve Think Tank Cooperation and Jointly Build Modern Silk Road*. Retrieved from: http://www.china.org.cn/world/2015-02/09/content_34773732.htm [04/12/2015].

Donnan, S. & D. Sevastopulo (2015) *AIIB head vows to be clean, learn and green – and fast.* London: Financial Times. Retrieved from: http://www.ft.com/cms/s/0/b6f95846-7b0d-11e5-a1fe-567b37f80b64.html#axzz3sby7ALlh [04/12/2015].

Emerging Market Multinationals (EMM) Network for Sustainability (2014) *Guidelines for Social Responsibility in Outbound Mining Investment*. Retrieved from: https://www.emm-network.org/case_study/cccmc-developing-guidelines-for-social-responsibility-in-outbound-mining-investment/ [04/12/2015].

EPF Think Week (2015) Sustainable Infrastructure Development – Challenges and Opportunities for Emerging Economies. Retrieved from: www.economic-policy-forum.org [04/12/2015].

G20 (2014) *The G20 Global Infrastructure Initiative*. Retrieved from: http://www.g20australia.org/sites/default/files/g20_resources/library/g20_note_global_infrastructure_initiative_hub.pdf [04/12/2015].

G20 Development Working Group (2014) *Infrastructure, Report on Infrastructure Agenda and Response to the Assessment of Project Preparation Facilities in Asia and Africa.* Retrieved from:

http://www.g20australia.org/sites/default/files/g20_resources/library/12%20Report%20on%20 infrastructure%20agenda%20and%20response%20to%20assessment%20of%20project%20 preparation%20facilities%20in%20Asia%20and%20Africa.pdf [06/12/2015].

Global Infrastructure Hub (2015) *Business Plan 2015-16*. Retrieved from: http://globalinfrastructurehub.org/content/uploads/2015/10/GIH_2015-16_Business_Plan.pdf [04/12/2015].

Institute for Sustainable Infrastructure (2015) *Sustainable Infrastructure Rating System*. Retrieved from: https://www.sustainableinfrastructure.org/rating/ [04/12/2015].

OECD (2015a) *Mapping of Instruments and Incentives for Infrastructure Financing: A Taxonomy*. Retrieved from: http://www.oecd.org/finance/private-pensions/Mapping-Instruments-Incentives-Infrastructure-Financing-Taxonomy.pdf [04/12/2015].

OECD (2015b) Official Development Finance for Infrastructure. Paris: OECD. Retrieved from: http://www.oecd-

ilibrary.org/docserver/download/5jrs3sbcrvzx.pdf?expires=1449422672&id=id&accname=gue st&checksum=8509FDFD39888B625D8345F295C01B45 [04/12/2015].

Ramirez, J. (2015) *Enabling Environments for Sustainable Enterprises*. Contribution to the EPF Think Week 2015. Mexico City: CIDAC. Retrieved from: https://www.economic-policyforum.org/wp-content/uploads/2015/09/WP_Enabling-Environments-for-Sustainable-Enterprises_ThinkWeek2015.pdf [07/12/2015].

Schmidt, T. (2015) *Incentivizing Private Sector Investment into Sustainable Infrastructure in Emerging Economies*. Contribution to the EPF Think Week 2015. Zurich: ETH Zurich. Retrieved from: https://www.economic-policy-forum.org/wp-content/uploads/2015/09/WP_Incentivizing-private-sector-investments-into-sustainable-infrastructure-in-emerging-economies ThinkWeek2015.pdf [07/12/2015].

Spiegel Online (2015) *Weltgrößter Versicherer: Allianz zieht Investitionen aus Kohleindustrie ab.* Hamburg: Spiegel Online. Retrieved from: http://www.spiegel.de/wirtschaft/unternehmen/allianz-zieht-investitionen-aus-kohleindustrie-ab-a-1064208.html [04/12/2015].

United Nations (2015) *Outcome Document of the UN Summit for the Adoption of the post-2015 Development Agenda*. Retrieved from: http://www.un.org/pga/wp-content/uploads/sites/3/2015/08/120815_outcome-document-of-Summit-for-adoption-of-the-post-2015-development-agenda.pdf [04/12/2015].

Wentworth, L. & C. G. Makokera (2015) *Private Sector Participation in Infrastructure for Development*. In: South African Journal of International Affairs. http://dx.doi.org/10.1080/10220461.2015.1081568

World Bank (2014) Statement by the Heads of the Multilateral Development Banks and the IMF on Infrastructure. Retrieved from: http://www.worldbank.org/en/news/press-release/2014/11/13/statement-heads-multilateral-development-banks-imf-infrastructure [04/12/2015].

World Economic Forum (2014) *The Global Infrastructure Gap*. Retrieved from: http://reports.weforum.org/strategic-infrastructure-2014/introduction-the-operations-and-maintenance-om-imperative/the-global-infrastructure-gap/#hide/fn-3 [04/12/2015].