

INCLUSIVE AND SUSTAINABLE GROWTH ASSESSMENT

I. ECONOMIC GROWTH, POVERTY, INEQUALITY, AND ENVIRONMENTAL DYNAMICS

A. Economic Performance and Rebalancing of the Economy

1. The People's Republic of China (PRC) is an upper middle-income country (UMIC) that has made tremendous progress in reducing poverty and developing modern physical and economic infrastructure. The PRC still faces complex development challenges, including regional disparities, environmental degradation, climate change, health security, and an aging society. Responding to these challenges is essential for the PRC to achieve high-quality development.

2. **Slowing economic growth.** After many years of accelerated growth, the PRC has become a UMIC, with the world's second-largest economy. Its per capita gross domestic product (GDP) reached \$10,070 in 2019. As the economy has matured, growth has slowed down—GDP increased by an average of 6.6% during 2016–2019, down from 7.9% in 2011–2015. Inflation has also moderated—consumer prices increased 2.1% on average during 2016–2019, down from 2.8% during 2011–2015.¹

3. **A rebalancing economy.** Consumption as a share of GDP increased to 55.3% in 2019, rebalancing the economy from its prior reliance on capital investment and external demand. Gross fixed capital formation as a share of GDP declined to 40.8% in 2019, which remains high compared to other countries. Efforts to support growth by boosting real estate and infrastructure investment since 2019 show that economic policy still depends on investment to generate growth, but the marginal productivity of capital has declined, reflecting an increased stock of infrastructure from fiscal stimuli. Gross domestic saving has moderated from 47.4% of GDP in 2015 to 44.8% in 2019 but remains high by international comparison and constrain consumption. The PRC's shift to a greater reliance on domestic consumption to drive growth has reduced the current account surplus from 9.9% of GDP in 2007 to 1.2% of GDP on average during 2016–2018, making economic growth less reliant on global demand.

4. **Services gain prominence while industry remains essential.** Services have become the major supply-side driver of economic growth during 2016–2019, shifting the structure of the economy toward services (53.3% of GDP); this process will continue as the economy matures. Although the industrial sector has declined in importance (to 39.7% of GDP), it remains essential because of its strong manufacturing base and employment generation capacity. It is expected to stay sizable as industrial upgrading continues, with high-value products increasingly of domestic origin. Agriculture contributed just 7.0% of GDP in 2018, but still accounts for over 27% of the labor force.

5. **High-quality development requires reforms and openness.** High-quality development requires increased productivity, upgraded technology, and greater social inclusion. Economic growth will decline as a result of the PRC's demographics and a softening marginal productivity of capital, but productivity gains from investments in innovation and human capital could buffer these effects. Moving toward a more market-based economy (para. 12) will serve to help sectors that are still far away from the efficiency frontier (i.e., low- and medium-tech sectors).² Offsetting the effects on the labor market of the PRC's demographic trends will require enhancing labor

¹ Data in the Inclusive and Sustainable Growth Assessment are based on national statistics unless otherwise noted.

² M. Zhu, L. Zhang and D. Peng. 2019. China's Productivity Convergence and Growth Potential—A Stocktaking and Sectoral Approach. *IMF Working Paper Series*. No. 19/263. Washington D.C.: International Monetary Fund.

force skills (para. 15) and social protection. Domestic reforms can help the PRC move toward high-quality development, but integration of the PRC into the world economy, especially global value chains, remains vital, as does international cooperation in the areas of trade and investment.

B. Fiscal Policies and Debt Management

6. **Need for reforms in central–local government fiscal relations.** Local governments provide most public education and health care services, but their revenue base is limited as they lack the authority to levy taxes or issue debt without central government approval. The budget law was amended in 2015 to allow local governments to issue bonds, but this has not changed the imbalance between spending needs and revenues. However, the amendment allowed local governments to finance deficits, refinance maturing off-budget debt, and engage in public–private partnerships (PPPs) to bring expenditure and revenue on-budget. The use of PPPs declined in 2018, but the local government bond market continued to grow and has bypassed the central government bond market in volume. The high reliance on bonds reflects local governments' lack of authority to raise revenue, which limits their capacity to provide high-quality social services. Recent cuts in the value-added tax (VAT) and personal income tax (PIT) (para. 7) have further eroded the revenue base of local governments.

7. **Fiscal reforms to reduce the tax burden rather than inequality.** Reforms included replacing the business tax on services with a VAT and reducing the number of VAT brackets in 2017, followed by a major reduction in VAT rates in 2019, when the highest bracket was cut from 16% to 13%. The PIT law was reformed in 2018, lowering effective PIT rates by increasing the tax brackets and introducing special allowances from 2019 onward. Policy reforms are needed to make the tax system more progressive and equitable, but the lack of property taxation and inheritance tax limits wealth redistribution. Taxation reform is also key to addressing high health care and pension costs, which are characteristic of an aging society (para. 21).

8. **Contained corporate leverage and rising household debt.** Credit to the non-financial sector reached 261.5% of GDP at the end of June 2019, up 22.0 percentage points from the end of 2015.³ Corporate debt decreased slightly from 158.6% of GDP in 2015 to 154.5% of GDP in 2019, as the government worked to reduce state-owned enterprise (SOE) debt. During the same period, household debt increased 15.6 percentage points to 54.6% of GDP in line with higher mortgages as housing prices increased. Public (central and local government) debt rose by 10.5 percentage points to 52.4% of GDP as some off-balance local government debt was curbed and budget deficits accumulated. Given the recent PIT and VAT tax cuts and efforts to stabilize economic growth via public infrastructure investment, public debt is expected to continue rising. Debt sustainability calls for structural reforms to boost economic growth through increased productivity, innovation, and efficiency rather than largely relying on public investment.

C. Monetary Policy and the Financial Sector

9. **Monetary policy challenges.** Following liberalization of lending rates in 2013 and deposit rates in 2015, and the introduction of greater exchange rate flexibility in 2014, the central bank has adopted a more interest-based monetary policy framework. In this transition, a new bank loan pricing mechanism was established in 2019 that brings interest rates closer to market values. The greater role of the market is welcome, but the new mechanism will reduce banks' profitability and increase their vulnerability to a potential rise in non-performing loans, currently at 1.9%. Despite

³ Figures in this paragraph are based on data from the Bank for International Settlements.

the changes, difficulties faced by private businesses and small and medium-sized enterprises (SMEs) in obtaining bank financing have not yet been resolved.

10. **Tighter financial supervision resulting in lower infrastructure investments.** There has been a coordinated tightening of financial supervision since 2017 to tackle the excessive expansion of riskier parts of the financial system, including shadow banking, interbank borrowing, and wealth management products. The efforts to reduce risk in the financial sector have succeeded in reducing the stock of non-bank financing outstanding in 2018 and 2019, but have also constrained access to credit, especially for private SMEs (para. 12), and limited local government off-balance sheet activities, which dampened investment growth in 2018. Some of this tightening was alleviated in 2019 by changes to the rules on using local government special bond proceeds to fund infrastructure development.

11. **Increased financial sector management and financial market access.** Access to the domestic bond market by foreign investors was broadened through the introduction of a cross-border bond trading scheme (bond connect) in 2017. However, rules and regulations in different market segments have yet to be unified. A new macro-prudential assessment framework was introduced in 2016, and the government established a Financial Stability and Development Committee under the State Council in 2017. In 2018, the banking and insurance regulators were merged and tasked with focusing on enforcement, while their legal and regulatory powers were moved to the central bank. Bank failures in 2019 showed the need to strengthen the banking resolution framework, especially for corporate debt, with a potential increase in non-performing loans as economic growth slows.

D. Business Environment

12. **Constraints to credit access remain.** The PRC was ranked 31st in the World Bank's *Doing Business Survey 2019*, up from the 80th place in 2015.⁴ The country has made progress during 2015–2019 in improving the business environment, but some areas continue to lag, including access to credit, where the PRC still ranked 80th in 2019. Access to credit appears particularly challenging for private companies, although private firms tend to be more efficient than SOEs, and fewer are loss-making. Reallocating credit from SOEs to the private sector remains a challenge, but it is critical to facilitate access to finance for SMEs, which generate more employment and are more innovative than SOEs, and can offer flexible solutions that are difficult for SOEs to provide.

13. **State-owned enterprise reforms.** SOEs accounted for 38.7% of industrial assets at the end of 2019 despite losses incurred by a significant number of SOEs. The average return on assets of industrial SOEs was 3.5% in 2019, below that of private enterprises (6.6%). Increased domestic and foreign competition will foster innovation and advance digitization, which would improve SOE efficiency. Opening the financial sector will likely increase foreign participation in banking and insurance, and thereby increase innovation. In this regard, a new foreign investment law took effect in January 2020, aiming to further loosen sectoral restrictions on foreign investment, including in financial services.

E. Labor Market Developments

14. **Labor market requires improved skills.** Survey-based unemployment statistics, which are available from 2017 onwards, indicate a stable job market with about 5.0% unemployment

⁴ World Bank. 2019. *Doing Business Survey 2019*. Washington D.C.

amid seasonal fluctuations. The stability of the unemployment rate is due in part to SOEs limiting layoffs for social and political reasons. In 2016 and 2017 employee compensation as a share of GDP increased to 51.0% in 2017 from a low of 45.6% in 2011.⁵ This has boosted domestic consumption and contributed to an economic rebalancing (para. 3).⁶ The number of migrant workers remains high and increased by 13.3 million to 290.8 million during 2015–2019. The overall labor qualification level in the PRC (and especially the percentage of highly skilled workers) remains low in comparison with advanced economies; about 70% of the population lacks a secondary education, which challenges innovation-driven and high-quality growth.

15. **Labor market and pension system challenged by demographic shifts.** During 2015–2018, the working age population (workers aged 16–59) in the PRC contracted by 4.0 million to 991.7 million, or 71.2% of the population. As the proportion of the population aged 60 and over increases, the labor force declines; this demographic shift, together with rising life expectancy, will increase pressure on the pension system. Employers' pension contributions were reduced in 2019, but the social security contribution collection system must be strengthened to improve the sustainability of pensions. Increasing the retirement age (currently 60 years for men and 50 years for women in blue collar jobs) will ease some of the pressure on the pension system.

F. Poverty, Gender, and Inequality Trends

16. **Progress in poverty reduction.** Living standards in urban and rural areas have improved following four decades of economic transformation. The PRC's Human Development Index (HDI) reached 0.752 in 2018, placing the country in the "high" human development category.⁷ The PRC has lifted over 850 million people out of poverty in 40 years and has eradicated extreme poverty in November 2020. The PRC has increased its efforts to address the multidimensional nature of poverty through reforms that have targeted the quality of health care and education, and the development of a social protection system. About 10 million people remain below the national poverty line of \$0.89 per person per day, but the number of poor increases to about 370 million when measured by the international poverty line for UMICs of \$5.50 per day, suggesting more effort is needed to advance toward higher-quality development.⁸

17. **Income inequality and regional disparities.** While the PRC has made remarkable progress in poverty reduction and extreme poverty eradication, income inequality remains a challenge. During 2012–2017, the Gini coefficient fell only marginally, from 0.474 to 0.467;⁹ this negatively influences the PRC's HDI, which when adjusted for income inequality falls to 0.643. Inequality in the distribution of income, education, and life expectancy further lower the HDI by 14.5% (footnote 7). Urbanization has lifted millions of people out of poverty, but its rapid pace has created imbalances. Disparities between the affluent coastal provinces and less-developed regions are significant, with provincial GDP per capita ranging from \$4,725 in Gansu to \$21,260 in Beijing. Despite nationwide economic modernization, rural areas suffer from limited access to education, job opportunities, and health care services. Economic growth and focused public investment plans have reduced the urban–rural income gap disparity from a factor of 3.3 in 2007 to 2.6 in 2019, but high-quality growth demands that this disparity be further reduced.

⁵ In 2018, the average wage grew slightly faster than nominal GDP; data on employee compensation not yet available.

⁶ Z. Huang and N. R. Lardy. 2016. [China's Rebalance Reflected in Rising Wage Share of GDP](#). *Peterson Institute for International Economics China Economic Watch*. 13 October.

⁷ United Nations Development Programme. <http://hdr.undp.org/en/countries/profiles/CHN>.

⁸ World Bank. 2019. *Poverty and Equity Brief*. Washington D.C.

⁹ Government of the PRC's National Bureau of Statistics. 2018. *China Statistical Yearbook*, Table 1-4. Beijing.

18. **New impetus for gender equality.** The PRC scores 0.673 in the World Economic Forum's 2020 Gender Gap Index (1 signifies gender parity), and ranks 106th out of 153 countries.¹⁰ Under the National Program for Women's Development, 2011–2020, the government has approved laws to strengthen women's economic empowerment and participation in decision-making, and promote equality in education and health, and women and the environment.¹¹ Disparities in educational performance remain between urban and rural areas, but gender gaps in primary and secondary education have largely been closed. The gross enrolment rate in tertiary education reached 45.7% in 2017, with the enrolment rate for women (56%) surpassing that for men (46%). Efforts to increase the number of female students in science, technology, engineering, and mathematics are underway. Maternal mortality has fallen to 29 per 100,000 live births in 2017, from 97 per 100,000 live births in 1990.¹² Notwithstanding these achievements, the PRC's ranking in the index suggests gender equality needs to be addressed more forcefully.

G. Human Development Trends

19. **Uneven access to quality education.** Despite overall gains in education, challenges remain. Since 2005, the PRC has more than doubled its public spending on education, to 4.1% of GDP. The country has made significant progress in expanding access to 9-year compulsory education (the net enrollment rate was 100.22% in 2018) and upper secondary education (with a gross enrollment rate of 103.5% in 2014), but pre-primary education is not universal. Higher education has expanded (para. 17) and the PRC has established the world's largest technical and vocation education and training system to meet the increasing need for technical skills. However, in order for education to support innovation-driven growth, a shift is needed away from rote and exam-based learning toward student-centered education, coupled with market-oriented technical and vocational education and training to close gaps in technical skills. Access to education remains uneven, with students in urban and affluent areas having greater access to better education opportunities. This is aggravated by the financial constraints of local governments in lagging regions, which struggle to retain teachers and upgrade school facilities and materials. The disparities require action to improve access to and the quality of education.

20. **Health care needs.** The PRC has increased public expenditure in the health sector, which reached 5.5% of GDP in 2018 from 1.4% in 2013. Universal medical insurance coverage is in place and a basic public health service system has been established. Under the Healthy China 2030 Action Plan, the PRC has placed health at the center of the country's development path.¹³ To support this, the government has made large investments in health care infrastructure in lagging regions, promoted community-based health insurance and nationwide public health campaigns, and increased the number of doctors in rural areas. However, there is room to improve efficiency, quality, and access to health care. To that end, the upcoming 14th Five-Year Plan, 2021–2025 is expected to boost primary health care, reduce disparities in health care, address the needs of an aging society, and strengthen health governance.

21. **Population aging compounds socioeconomic challenges.** The PRC's population is aging rapidly and it is likely to peak in size earlier than anticipated (at 1.4 billion in 2026) because the birth rate has been falling despite the adoption of the two-child policy. The proportion of people

¹⁰ World Economic Forum. 2020. *Gender Gap Report*. Geneva.

¹¹ Laws include the Law on Promotion of Employment (2007), Labor Contract Law (2008) prohibiting discrimination in the workplace, Law on Maternal Insurance (2010), Amendment to the Organic Law of Village Committees (2010) requiring quotas for women representation, and Law on the Prevention of Domestic Violence (2015). Sexual harassment is now included in the Labor Protection of Employees (2008).

¹² World Health Organization. 2019. *Maternal Health*. Geneva.

¹³ Central Committee of Chinese Communist Party State Council. 2016. *The Plan for Healthy China 2030*. Beijing.

aged 60 years and above is expected to reach 30% by 2050, resulting in the PRC having the oldest population in the world. The development of a long-term elderly care system is in its infancy, but traditional family support systems are increasingly unable to meet elderly care needs because of rapid urbanization, migration from rural areas, and decades of the one-child policy. Affordable nursing houses with a professional workforce are still lacking, and the private sector is not sufficiently engaged in the provision of elderly care services.

H. Environment and Climate Change

22. **The need for improved natural resources management.** The PRC has made substantial progress toward the achievement of its environmental goals, especially its air quality targets.¹⁴ However, environmental degradation and the impacts of climate change remain a threat to the PRC and the Asia and Pacific region (the region). In addition to health impacts, the cost of pollution damage is estimated at 6%–9% of GDP.¹⁵ Moderate to heavy smog affects hundreds of millions of people within the PRC and the region. The water quality in one-third of the PRC’s key national river basins is considered unsafe for human contact, and over half of the lakes and reservoirs are polluted by discharge of industrial and domestic sewage and excessive use of fertilizers. Soil contamination from past industrial activities compounded by poor management of solid waste and rural sanitation has led to severe ecosystem degradation. About 70%-80% of the PRC’s croplands, forestlands and grasslands are degraded.¹⁶ Environmental policies that meet the standards of the Organisation of Economic Co-operation and Development are being implemented more rapidly than in other emerging economies, but improved management of natural resources is an essential element of a greener development model.

23. **Waste has become a major environmental hazard.** Solid waste is projected to rise to 600 million tons annually by 2030 from 300 million tons in 2011. It contributes to air, soil, and water pollution, and is a threat to human health. A growing part of this is the plastic waste that is discharged into the PRC’s rivers. The PRC has become the world’s largest contributor (30%) of plastic pollution, which affects the country’s coastal cities, the region, and the Pacific Ocean.¹⁷ Plastic adds to other sources of marine pollution carried by rivers, including inorganic nitrogen, phosphate, petroleum hydrocarbons, organic matter, and heavy metals.

24. **Threats from loss of biodiversity.** The PRC is one of the 17 “mega-biodiverse” countries that support the largest number of species in the world, but the high biodiversity of the Yangtze River and Yellow River regions is at risk. The impact of rapid infrastructure construction; mining; land reclamation; air, water and soil pollution; overhunting and overfishing; wildlife trade; and climate change have degraded habitats and damaged biodiversity. More determined conservation efforts are needed to preserve ecosystems and protect the income of those who depend on natural resources for their livelihood. Biodiversity loss can have significant direct human health

¹⁴ Data in paras 22–25 are based on national statistics from Ministry of Ecology and Environment unless otherwise noted. During the 13th Five-Year Plan (Government of the PRC. 2016. *The 13th Five-Year Plan for Economic and Social Development of the People’s Republic of China*. Beijing), the PRC successfully achieved a number of targets, including (i) reduction of sulfur dioxide emissions as an air pollutant, and of carbon intensity; (ii) improvement of water quality and water use efficiency; and (iii) increased forest cover and stock.

¹⁵ ADB. 2012. *Toward an Environmentally Sustainable Future—Country Environmental Analysis of the People’s Republic of China*. Manila.

¹⁶ A. Hanson. 2019. *Investing in Natural Capital and Ecosystem Services in the People’s Republic of China: Striving towards Effectiveness, Efficiency and Sustainability*. ADB East Asia Working Papers No. 21. Manila.

¹⁷ J. Jambek, et al. 2015. Plastic Waste Inputs from Land into Ocean. *Science* 347(6223). Pp. 768–771. Washington D.C.

impacts if ecosystem services—which supply fresh water, food and fuel—can no longer meet human needs.¹⁸

25. **Climate change impacts demand greater efforts.** The PRC has experienced significant impacts from climate change, with air temperature and sea level increases that exceed the global average. Progress in climate change adaptation and mitigation has been made since 2010, underpinned by efforts to enhance climate resilience and reduce vulnerability. The PRC has implemented policies to control coal consumption and increase the use of natural gas and renewable energy. In 2017, the PRC's carbon intensity [carbon dioxide (CO₂) emissions per unit of GDP] declined by about 46% compared to 2005, exceeding the 2020 target of reducing carbon intensity by 40%–45%. This was the result of proactive actions, including adjusting the industrial and power structure, improving energy efficiency, and controlling greenhouse gas emissions from non-energy activities. Actions have also been taken to foster sustainable and climate-smart agriculture practices, but more effort is needed to achieve the PRC's nationally determined contributions: achieving a peak in carbon dioxide emission around 2030, lowering emissions per unit of GDP by 60%–65% from 2005 by 2025, increasing non-fossil fuel use to 20% of the total energy share by 2025, and increasing forest stock volume by 4.5 billion cubic meters from 2005 by 2030.

II. CHALLENGES FACING HIGH-QUALITY GREEN DEVELOPMENT

26. The PRC's unprecedented pace of development has come with high costs. Rapid growth has been accompanied by social inequality and severe environmental degradation and pollution. New challenges have emerged, including health security and the aging of society. These multifaceted issues require integrated approaches and strengthened institutions. Some of the major development challenges in the PRC's pursuit for high-quality green development are described below.

A. Social Challenges

27. **Closing the inequality gap.** The gains of decades of rapid growth that have dramatically improved social and human development in the PRC have not been shared evenly. Inequality will hinder future growth. It undermines consumption, constrains development in lagging regions, and generates social tensions. Tackling inequality of income and opportunity requires policy actions to reduce disparities in environmental, social and economic conditions between regions and between rural and urban areas. Income redistribution policies, a more progressive taxation system, strengthened social protection, and private sector solutions are needed to ensure inclusive growth.

28. **Strengthening health security.** Epidemic outbreaks have ramifications beyond the impact on human lives. Health systems should be strengthened to support prevention and rapid response during health emergencies. Institutional changes to improve disease detection, surveillance, containment and mitigation measures should be prioritized. The PRC plays a critical role in global health security with an increasingly mobile and highly dense urban population.¹⁹ The growing international exchange of goods, services, and people poses increased risk of transmission of major public health threats and infectious diseases, which requires strengthening

¹⁸ World Health Organization. 2015. [Biodiversity and Health](#). Geneva

¹⁹ Health security is defined by the World Health Organization as the activities necessary to reduce the risks of acute threats to the health of populations in a country and across borders.

of health systems; the government has identified that efforts to achieve this must include improved vertical and horizontal institutional coordination and policy reforms.²⁰

29. **Aging before affluence.** Aging in the PRC is complex because the shift toward an older population is taking place while the PRC's level of per capita income is relatively low compared with other countries with a similar demographic profile. The aging of the population has broad repercussions—if unaddressed, it will undermine economic growth and future development. The structure of the labor market, the pattern of savings, and migration flows all change in an aging society. The challenge of aging is greater in rural areas, where the old-age dependency ratio is higher, pension coverage is minimal, elderly care facilities are scarce, and local governments are indebted. Developing long-term elderly care requires establishing a financial framework and expanding the provision and quality of elderly care services with adequate medical facilities and human resources. To achieve this, elderly care should be integrated into health planning, policies, and institutions.

B. Institutional Gaps

30. **Strengthening institutions and capacity to support reforms.** Delays in institutional reforms limit economic efficiency, constraining the country's growth potential. Sound institutions are a catalyst for economic growth and development. The PRC's transition to a high-quality development model that emphasizes innovation, sustainability, inclusiveness, and a more sophisticated concept of human well-being requires strengthened institutional capacity and policies. This is particularly important at the local level and in lagging regions, where most of the public investments and services to support high-quality development will be delivered. Major investments in natural and social capital alongside new investments in physical and human capital could yield dramatic advances in the quality and sustainability of the PRC's development. The benefits will positively impact the region given the PRC's prominence in global supply chains, trade, and investment flows.

31. **Removing constraints on the private sector.** The PRC's reliance on public investment as a source of growth has constrained the role of the private sector in the economy. The private sector, which is a fundamental engine of long-term growth, relies on liberalized financial services, well-functioning capital markets, and favorable investment climates. Private companies in the PRC generate the largest share of GDP growth and employment. They include SMEs, which are critical for a vibrant service-based economy but face difficulties accessing financial resources. SMEs produce about 80% of the PRC's innovative products, and innovation-driven growth in the PRC will benefit from greater private sector participation. This can be boosted by further financial liberalization to widen access to financing options by private companies, and by deepening market-oriented reforms, including reform of SOEs. This will promote fairer domestic competition and openness by adopting international standards of competition and transparency.

32. **Investing in innovation and human capital.** The shortage of investment in human capital in the PRC undermines productivity growth. There are large technological and productivity gaps between the PRC and advanced economies; for example, industrial productivity in the PRC is 33% of that in the United States, and services productivity just 29% (footnote 4). The gap is compounded by the end of the advantages that the PRC enjoyed as a result of its previously low labor costs, and by the decline in its birth and mortality rates (the "demographic dividend"). This implies that future growth must be driven by productivity increases. To that end, it is vital for the

²⁰ Government of the PRC. 2019. *Healthy China: Moving from Blueprint to Action with a New focus on Public Health*. Beijing.

PRC to accelerate innovation and technological upgrading, with a focus on human capital. This will improve capacity for reform and institutional strengthening and foster the development of the private sector. The PRC has recently increased investments in research and development to levels similar to those in the Organisation for Economic Co-operation and Development member countries, and has become a world leader in financial technology, digitalization, and e-commerce. Yet, more investments in human capital are needed to support the transition to high-quality development.

C. Environmental Degradation

33. **Improving natural resources and conserving biodiversity.** The past development model has strained natural resources. Years of maximizing production output through high energy intensity, the conversion of arable land for non-agricultural use, and overutilization of soil and water have come at a high cost. The PRC became the world's largest emitter of CO₂ in 2006. Managing natural resources effectively is critical for human health and to ensure the environmentally sustainable future of the PRC and the region. Environmental degradation disproportionately affects the poor and vulnerable and damages ecosystems. Many rural livelihoods depend on forests, water, wetlands, fields, and pastures, meaning that biodiversity conservation efforts are vital for sustainable development and poverty reduction.

34. **Reducing air and water pollution.** Air and water quality must be improved. More than 47% of the country's cities do not meet the national standard for particulate matter less than 2.5 micrometers in diameter (PM_{2.5}), and there is a high rate of rural air pollution stemming from stalk burning, fertilizer application, and livestock farming.²¹ Fresh water resources are scarce and unevenly distributed. Water quality is improving in minor river basins, but formidable challenges remain in the regions surrounding the country's largest rivers; reducing pollution of groundwater, lakes and reservoirs caused by untreated wastewater from households and agricultural activities is also a challenge. Institutional reforms, capacity building and private sector participation are needed to develop long-term solutions for management of air and water pollution.

35. **Managing solid waste.** Solid waste poses a growing environmental challenge in the PRC, and contributes to air, water, and soil pollution. A scarcity of sites for landfills and waste-to-energy programs has prompted municipalities to incinerate solid waste, which intensifies air pollution and threatens public health. Plastic pollution is widespread in rural areas, but management of plastic is undermined by the financial constraints faced by farmers. The uncontrolled discharge of plastic in large rivers leading into the Pacific Ocean damages ecosystems and erodes biodiversity and livelihoods in the PRC and the region. The PRC's capacity to manage its rivers and ecological environment needs to be strengthened, with more attention given to promoting a transition to a circular economy, with an emphasis on solid waste management, extended producer responsibility, recycling, materials recovery, and waste-to-energy approaches.

D. The Impacts of Climate Change

36. **Reducing climate change vulnerabilities.** Rising sea levels are affecting the PRC's densely populated coastline. Increasing air temperatures damage agriculture, forests, water resources, and human health. In addition to the threat to the ecological environment, the main economic consequences of climate change in the PRC are reduced agricultural production, damage to infrastructure from frequent natural disasters, and loss of income. The average annual

²¹ Government of the People's Republic of China, Ministry of Ecology and Environment. 2019. *Work Report on Progress Towards Environmental Protection Targets in 2018*. Beijing.

cost of disasters (excluding crop failure) is estimated at 1%–3% of GDP.²² It is projected that the PRC will lose 27 square kilometers of land area per year to rising sea levels, displacing one million people annually. In addition, about one-third of the PRC's 120 million hectares of agricultural land are affected by crop failures resulting from climate-related disasters. Climate change can negatively impact the PRC's commendable achievements in poverty reduction, slowing development in rural areas and increasing regional disparities. Policy actions should increase resilience in agricultural production and rural development by promoting the use of climate-smart technologies and climate-resilient infrastructure and supporting a transition to cleaner energy.

37. **Promoting low-carbon cities.** Achieving the PRC's nationally determined contribution requires cities to adopt a low-carbon development path. Urbanization plays a critical role in low-carbon development because well-planned cities can be catalysts for green growth, but this requires planning coordinated use of urban land to develop livable cities with green spaces, climate-smart buildings, and efficient public transport. Carbon-free cities are also essential to reducing emissions. This could be achieved by ensuring the effective implementation of green policies and power sector reforms, and by enhancing the national emission-trading system.²³

III. IMPLICATIONS FOR ADB COUNTRY ENGAGEMENT

38. The CPS will be aligned with government's efforts to support the PRC's transition to high-quality, green development. Key areas in the country's envisaged reform agenda include upgraded human capital for higher productivity; improved natural resource management to fight climate change, loss of biodiversity, and damaged ecosystems; increased regional health security; and greater social inclusion in the context of an aging population.²⁴ In line with ADB's Strategy 2030 and its approach to UMICs, the CPS will focus on selected development constraints for the PRC to move to high-income status in connection with ADB's graduation policy and criteria.²⁵

39. **Tightening the strategic focus.** The PRC's development challenges are unique in scale, scope, and complexity. They have both regional and global implications. Given that ADB's support is modest compared to the scale of the government's development plans, ADB's interventions under the new CPS need to be selective and catalytic for greater impact. This has implications for ADB's country engagement. Under a tightened scope, ADB's core objective is to focus on development challenges where ADB adds value through innovative demonstration projects that generate regional public goods and disseminate valuable knowledge. Areas of previous assistance where the PRC has successfully replicated and implemented projects by itself will not be included in the CPS.

40. Given the cross-cutting nature of the PRC's development challenges, ADB's strategy and operations must be cross-sectoral, and focus on selected key impediments to high-quality green development. In alignment with ADB's approach to UMICs, the specific areas of engagement will be determined by ADB's contribution to strengthen policies and institutions, support the

²² World Bank. 2013. *Climate Trends and Impacts in China*. Washington D.C.

²³ The PRC's Nationally Determined Contribution caps CO₂ emissions by around 2030; lowers CO₂ per unit of GDP by 60% to 65% from the 2005 level; increases the share of non-fossil fuels in primary energy consumption to 20%; and expands the forest stock volume by around 4.5 billion cubic meters from the 2005 level.

²⁴ These priorities will feature in the PRC's forthcoming 14th Five-Year Plan.

²⁵ ADB. 2018. *Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific*. Manila; ADB. 1998. *A Graduation Policy for ADB's DMCs*. Manila; and ADB. 2008. *Review of the 1998 Graduation Policy of the Asian Development Bank*. Manila.

generation of regional and global public goods, and create knowledge. These engagement areas will cut across the CPS strategic pillars.

41. **Achieving high-quality green development.** The overarching goal of the CPS is to support government efforts to realize high-quality green development. Investments and knowledge solutions will focus on environmentally sustainable development, climate change adaptation and mitigation, and social development.

- (i) **Environmentally sustainable development.** ADB will support government initiatives in pursuit of environmentally sustainable development. ADB's operations will contribute to the improved management of natural resources (air, water, soil, and marine) to reduce pollution and degradation through selected investments and institutional capacity development. Under its Healthy Oceans Initiative, ADB can support inclusive livelihoods and business opportunities in tourism, protect and restore coastal and marine ecosystems and rivers, and reduce land-based sources of marine pollution including plastic in upstream rural and urban areas.²⁶ ADB will also support the PRC in biodiversity conservation through targeted investments promoting the sustainable use of natural resources in biodiversity hubs. ADB's efforts to develop a national eco-compensation mechanism to promote environmental protection and restoration will continue under the increased focus of the CPS on institutional and policy strengthening. ADB will mainstream private sector solutions to develop environmental infrastructure.
- (ii) **Climate change adaptation and mitigation.** Climate change has a significant global dimension and challenges high-quality green growth in the PRC. ADB will partner with the government to expand efforts to tackle climate change vulnerabilities in rural and urban areas. ADB will support the development of climate-resilient technologies and boost climate-change resilient and smart agriculture to transform agriculture systems in support of green development and help ensure food security in a changing climate. ADB will also engage to strengthen disaster risk management with a focus on flood-risk containment policies. ADB operations will target low-carbon development by promoting green infrastructure; energy efficiency; waste-to-energy technology; clean cooling and heating; state-of-the-art clean energy interventions, including carbon capture, utilization, and storage; and hydrogen technology. Operations will also target the development of zero-waste and near zero-carbon cities, the mainstreaming of green finance, and private sector investments.
- (iii) **Aging society and health security.** ADB will introduce best practices to respond to the needs of an aging society through a sound institutional and policy framework to develop a three-tiered (home, community and residential-based) elderly care system supported by private sector investments. ADB operations will strengthen national and regional health security and help the health sector cope with the strain of emerging infectious outbreaks, as well as the increasing prevalence of non-communicable diseases in a rapidly aging society. This will be pursued by promoting the One Health approach to achieve optimal health outcomes that recognize interconnections between people, animals, and the environment. Increased capacity for governance and transparency, health emergency preparedness and response, and enforcement of food and health product

²⁶ ADB. 2019. *Action Plan for Healthy Oceans and Sustainable Blue Economies*. Manila.

standards will be also provided. ADB will mainstream private sector solutions to reduce inequalities through enhanced access to finance, food security, affordable health, and education.

42. **Boosting the One ADB approach.** ADB needs to draw together skills and talents from across the organization to provide support in areas where ADB can add value and has a comparative advantage. This approach will include (i) close cooperation between sovereign and nonsovereign operations, including PPPs, to offer a broad range of solutions to the PRC in its transit to higher quality and greener development, and (ii) strengthened synergies between operational and knowledge departments within ADB to provide knowledge and innovation-based solutions to complex development issues.

43. **Sharing knowledge.** Knowledge and innovation will continue to play a prominent role in shaping ADB's response to the PRC's development challenges. The CPS will consider the increased global responsibility of the PRC and its potential to share knowledge. The country's unprecedented achievements in poverty reduction and other fundamental reforms offer lessons that can benefit developing member countries and contribute to the global development agenda.