LIVING WITH CHINA
September 2023

CHINA EXECUTIVE BRIEFING
LOOKING FOR POST-COVID STABILITY

An initiative of Asia Society Australia in partnership with China Policy supported by the National Foundation for Australia-China Relations
China Executive Briefing is an initiative of Asia Society Australia to provide up-to-date, impartial and accessible analysis of China’s economic policies and trends and their implications for Australia.

Australia’s relationship with China is complex. China is Australia’s largest trading partner, the leading economy in the region and a global technology and innovation leader. Yet, relations have been strained in recent years with trade disputes, the COVID-19 pandemic, and an increasingly unpredictable geopolitical environment.

While the fault lines in the bilateral relationship are well known, 2023 has ushered in a period of more constructive relations as the Australian Government seeks to stabilise the relationship and further restore access for Australian exporters.

As the Australian economy remains closely intertwined with that of China’s, an informed understanding of the shifts and drivers of Chinese economy is crucial to Australia’s prosperity. More than ever Australian leaders in business, government and academia need to be informed about policy developments in China to make organisational decisions to manage opportunities and risks.

Since 2021, China Executive Briefing has sought to address this need through quarterly analyses of China’s economic policies and trends in the areas most pertinent to Australia. With the support of our project partners China Policy, this analysis has featured policy briefs covering China’s policy ecosystem, profiling its major policymakers, and identifying the constantly evolving and dynamic consumer trends.

Tracking policy stemming from China’s 14th Five-Year Plan, the initiative has covered a range of sectors most relevant to Australian business, including science & technology, climate change, food & agriculture, energy & resources, health, investment, education and e-commerce.

Each policy brief has been complemented with an executive briefing that contextualises China’s policy developments for Australian business, featuring international experts across the areas of academia, government and trade & investment.

All policy briefs and executive briefings are available at the initiative’s microsite at: https://chinaexecutivebriefing.asiasociety.org/

This report acts as an addendum to the China Executive Briefing initiative with a specific focus on how the COVID-19 pandemic impacted China’s policy landscape relative to the sectors covered throughout the initiative.

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CHINA SEARCHES FOR POST-COVID STABILITY

The COVID lockdowns delivered an inflection point to the economy. Decades of growth enjoyed by President Xi Jinping’s predecessors were built on dubious foundations; COVID accelerated their erosion. The economic model blended unique local features with lessons learned from other East Asian development states, especially Japan. These states have mostly moved to advanced-income status following an established pattern:

- strong and interventionist state
- well-educated and skilled workforce
- close relations between the state and business
- focus on export-led growth

However the unique characteristics visible in Chinese history and still at play, appear to be setting the Peoples Republic of China on a different course. Its scale, lack of a federal structure, unresolved centre-local tensions, massive urban-rural divide created by the hukou system, and insistence on Communist Party primacy in value-setting of all kinds were of growing concern pre-COVID. Now greater centralisation, collapsing local government revenues and slowing household incomes experienced over the last three years have exacerbated challenges to modernisation.

Nevertheless, alongside the gloomy outlook and tightening budgets, the policy wheels of the new administration keep turning. Some sectors find a silver lining in new funding, subsidies, tax breaks and the like. In the past the economy was only stable at turbo speed. The new era will need to find new sources of both stability and growth. This publication examines these challenges from technology to ageing. It also highlights the key new government economic officials and identifies some interesting opinion shapers to watch.
MACRO

AFTER THE PANDEMIC

COVID was the ultimate ‘black swan’ event long dreaded in Beijing. As well as the human cost, COVID revealed like nothing before it the patchwork nature of solutions to the pre-existing economic and societal imbalances.

COVID revealed structural issues and inflexibility in China’s economy. December 2022 was marked by irreconcilable demands for both stability and high growth rates, and by revelations, meanwhile, of spreading distress in all sectors of the economy. These tensions reflected the persistence of lockdown vested interests resistant to change, almost a quasi COVID-industrial complex, akin to military-industrial complexes in other places.

Early 2023 saw confidence struggling to revive. After seeing off some high-ranking factional rivals, the third Xi administration doubled down on re-centralising by piloting all-China marketing, taxation, income and food security policies. But sociologist Sun Liping managed to sound the alarm felt at grassroots levels about the dual structure creeping into the economy.

A much hoped-for post-COVID economic recovery started impressively, only to fade in the summer heat. Curbing of COVID restrictions helped a suffering services sector; but industry and manufacturing have been less fortunate. Exports slumped as global demand waned.

The much anticipated deflation of the real estate bubble has commenced. The sector, accounting for 20-30 percent of the economy and also serving as the primary store of household wealth, is in its second year of decline. The financial struggles of Evergrande dominated headlines in 2022, dragging not only up- and downstream industries with it, but local government financing, household confidence and spending levels as well.

Beijing has largely sat on the sidelines, prioritising helping developers complete already sold projects but offered little in the way of help for new ones. Curbing reliance on the housing sector is a cornerstone of Xi’s plan for a greener, high-tech, and innovative economy. Steering capital away from housing allows more to be directed towards new tech and innovation.

A huge stimulus package is unlikely. The central government’s 2023 GDP annual growth target was a mere five percent, below most expectations. Moderate increases in infrastructure spending and more monetary easing are expected. The central bank will likely prefer targeted lending programs. Logistics and clean coal were beneficiaries in previous years; real estate-related credit may be about to join the list.

Sun Liping 孙立平
Sociology Department, Tsinghua University

Longstanding professor of sociology at Tsinghua University, Sun has written widely on issues of the day before and during the Xi Jinping era (2013–). He often addressed ‘social disintegration’ and, more broadly, inequality and class division, which he deems an ever-present threat.

Post-lockdown, Sun argues that a ‘neo-dual structure’ is increasingly shaping PRC society.

A chart shows retail sales slowed by almost half over last 4 years.

Source: NBS, China Policy

PRC neo-dual structure

Money circulates in the upper ‘national economy’ sphere, financing massive infrastructure, high-tech, high-end manufacturing, military industry, SOEs, state employment and more. Less flows around the lower segment, a zone of falling incomes, job losses, debt stress, and souring expectations. A central oval bobs in the lower zone, representing exports, and showing how the mainly low-end products support the incomes of much of the public. With exports falling, incomes are declining, jobs are scarce; in this zone, consumption is sputtering. The dotted line may move down over time, most likely shrinking the portion of the national income the general public enjoys.
NEW GREEN TECH

LATEST ECONOMIC DRIVERS

Beijing needs new growth drivers. Past resource-intensive growth is no longer viable. Labour costs are rising and environmental exploitation faces increasing scrutiny. New factors of production (technology and data) are set to power future growth.

GREEN TECH: A KEY TO TRANSITION

Green tech promises the multiplier effect Beijing is looking for. Since early 2023, three new technologies have been designated ‘the three new export goods’:

- new energy vehicles
- lithium batteries
- photovoltaic products

Great hopes are being placed in these to fuel the PRC’s transition from the factory of the world to a global provider of hi-tech goods. In Q1 2023, the total export value of these goods reached C¥264 bn, (US$37 bn) up 67 percent y-o-y, accounting for five percent of exports, up 1.7 percentage points y-o-y.

More than simply addressing environmental objectives, a driving force is a fundamental recognition that energy and cars are among the world’s most profitable industries. Fossil fuels and the conventional car industry supported the development of advanced economies (like Germany and Japan). Similarly, green tech is by the same token hoped to power the future of the PRC.

DE-FOSSILISING AUTOS

Currently, 94 percent of cars on China’s roads remain fossil fuel-powered. But complete electrification may be closer than this suggests. In 2022, 25 percent of new car sales were new energy vehicles (NEVs), a target initially set for 2025. The ratio is forecast to reach 30 percent in 2023. As cars may remain on the road for up to 12 years, complete electrification of the country’s auto fleet is now within reach.

NEV production and sales in China, 2016-22

Source: China Association of Automobile Manufacturers, 36Kr Research Institute
NEV sales in 2023 may exceed nine million, but production capacity will top 11 million, according to former Minister of Industry and Information Technology Miao Wei. An NEV is, indeed, produced every three seconds, raising concerns about overcapacity. Yet optimism prevails: the PRC is betting on green tech's huge global growth potential.

What really must be curbed, argues Miao, is the excess of fossil fuel-powered vehicles. Nevertheless, some fear a race to the bottom to cut costs at the expense of quality.

Overcapacity is driving early success in exports. In 2022, PRC car exports surpassed Germany, making it the world's second-largest exporter. While overall post-lockdown recovery disappoints, the green tech sector continues to boom. NEVs alone made up more than 50 percent of overall export growth in Q1. The General Administration of Customs reports the export value of the 'three new export goods' soared in the first five months of 2023, reaching:

- C¥114 bn for electric passenger vehicles (up 172 percent from the same period last year)
- C¥184 bn for lithium batteries (up 78.5 percent)
- C¥152 bn solar panels (up 24 percent)

This reflects the PRC's transition from the world's largest importer of fossil energy to the largest exporter of renewable energy tech, says Securities Daily columnist Li Chunlian.

A COMPLEX LANDSCAPE

The wager on green tech is certainly a risky one. Most domestic NEV makers are yet to show a profit. Wang Chuanfu, the chair of China's largest NEV maker BYD, says the industry is now in a knockout round, determining which of the 100+ NEV firms will ultimately prevail. Globally, green tech is entangled with national security concerns, as recent PRC export controls on gallium and germanium critical minerals show. Further escalating tit-for-tat in global technology exchange poses a real risk.

Economic analysts say the wager is worth taking. Demand for green tech will be vast if countries seriously aim to fulfil their carbon reduction pledges. Strategy must look beyond currently existing technology. In NEVs, for instance, the PRC focuses on autonomous driving and other 'smart' features. Whoever defines the standards for these is set to benefit enormously.
TRADE

CONFRONTING THE ‘PARADIGM SHIFT’

US-China rivalry, dwindling global demand and relocation of industries to lower-cost countries places pressure on outbound trade. Confronted with this paradigm shift, the Chinese government will need to deploy a mix of measures: supporting exports, expanding domestic consumption, strengthening trade ties with partners, fostering tech innovation and more.

BEIJING’S TRADE STRATEGIES

Despite the decline in exports overall, NEVs, batteries and solar panels, as shown above, are the new trade drivers. The rising impact of climate change will see these industries continue to lead growth, as they enjoy government support including tax breaks.

As demand from advanced countries drops, Beijing is pivoting to trading partners in the Global South, including members of the BRI (Belt and Road Initiative) and the Association of Southeast Asian Nations. Border trade and port logistics cooperation will be promoted to integrate supply chains with neighbours. The Regional Comprehensive Economic Partnership trade group (RCEP) will finally enter into force for all members, boosting regional trade prospects. Expect to hear more on PRC-ASEAN cooperation, such as RCEP+ and PRC-ASEAN FTA 3.0 negotiations.

Beyond expanding trade flows, Beijing is touting a new doctrine of ‘institutional opening’, bringing in globally compliant rules, regulations, management norms and standards to align with the elevated standards of emerging trade pacts like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

Pilot free trade zones have been given new marching orders, and placed on notice to launch reforms addressing remaining gaps between China and the CPTPP standards. Accession to the agreement will ultimately be a consensus decision of the CPTPP members.

Regardless, Yunnan University academic Lu Guangsheng urged pressing ahead with lobbying for membership in 2023, when New Zealand, not unfriendly to PRC membership, chairs CPTPP. The process of joining is seen by some as more important than the outcome. Lu argues that the PRC should of its own accord carry out reforms to reach CPTPP standards because such reform is vital to services trade and attracting overseas investment.

STRENGTHENING TIES WITH THE GLOBAL COMMUNITY

Many reformers call for creating a ‘unified national market’, capturing the potential of domestic consumption and attracting imports. This will hopefully drive the economy forward and build stronger ties with overseas markets.

Cross-border e-commerce (CBEC), now accounts for some five percent of total trade and is growing rapidly. As the world’s second largest digital economy, the PRC has an edge over global rivals that the government is determined to defend. Policy support such as tax breaks, logistics assistance, the building of overseas warehouses and pilot zones is not likely to slow. PRC-BRI ‘silk road e-commerce’ trade may be expanded, given shifting geopolitics and trade complementarity. CBEC shoppers increasingly seek value-for-money goods, as seen in Temu’s budget e-commerce explosion abroad and the June shopping festival trends at home.
SCITECH

SHIFTING PRIORITIES

The scitech sector is seeing a strategic pivot from supporting economic growth to bolstering security. While the earlier strategy sought to fuel economic and societal advances under a loose ‘innovation-driven development’ rubric, the focus is now on solving bottlenecks in core tech, self-reliance, and security in the ‘new nationwide system’.

ROAD TO TECH SELF-RELIANCE

The precise strategic plan is still taking shape. Local commentators and policy advisers draw on a Mao-era command system that mobilised scientists for the PRC’s nuclear weapons program. Commentators underscore overseas alternative models such as the US Defense Advanced Research Projects Agency or the German Fraunhofer Gesellschaft are studied. Commentators argue self-reliance need not equate to de-globalisation or substitution.

After being on the horizon for a few years, the urgency of tech-self reliance has risen with the increase of US controls on high-end semiconductors and related equipment in October 2022. Beijing is attempting to map out strategic emerging industries and R&D priorities within them. This includes both technologies where China is behind (like semiconductors) and technologies where it perceives an advantage (like new energy and smart vehicles).

R&D expenditure and intensity in China, 2010-22

Source: China Science and Technology Statistical Yearbook

Total R&D expenditure surpassed C¥3 tn for the first time in 2022, corresponding to roughly half of US R&D spending. R&D investment intensity surpassed 2.5 percent in 2022. This had been the 2020 target in the 13th 5-year plan, but it was not achieved.

Ding Xuexiang 丁薛祥
Executive Vice Premier

Becoming executive vice premier in March 2023, Ding now oversees the scitech portfolio. The ‘innovation-driven development strategy’ remains important, he highlighted at the Zhongguancun Forum in May 2023. But the innovation ecosystem needs to be improved to allocate resources better and ensure alignment with national strategies. Strengthening basic research while improving incentive structures for transforming scitech successes is the way forward. Despite focusing on self-reliance, Ding underscored that the PRC is open to engagement in global innovation governance and welcomes flows of talent, technology, capital, and data.
SCITECH AGENCY RESHUFFLE

A major restructuring of scitech agencies was announced at the annual gatherings of the National People’s Congress (NPC) and the Chinese People’s Political Consultative Conference (CPPCC) (known as the Two Sessions) in March. A new Central Science and Technology Commission (CSTC) is set to bolster central Communist Party oversight. The Ministry of Science and Technology (MoST) will yield a range of responsibilities to other ministries, and no longer participate in the supervision of specific research projects. It will instead coordinate nationwide efforts to tackle strangleholds in core technologies as the CSTC’s executive arm.

Financing streams for technology remain a conundrum. How can the state dictate strategic goals while letting market forces pick winners and allocate resources effectively? How can the state strengthen blue-sky basic research, while ensuring that R&D is goal-directed? Enterprises are expected to become the main drivers of innovation, but they must follow state guidance.

DIVERSIFYING FINANCING CHANNELS

Changes to the scitech funding landscape are expected. The Two Sessions hinted at tweaks to the system for funding state-supported R&D projects; once again, precise details are awaited. Officials increasingly recognise the shortcomings of the PRC’s bank-funded financing. As international investments dwindle, tech startups struggle to access long-term, risk-tolerant capital. An action plan to bolster financing for tech-based enterprises was approved in mid-June. It promises to diversify financing channels and puts a focus on private equity.

SOES TO CATALYSE RESEARCH

Making state-owned enterprises (SOEs) innovate is part of this action. A new leading group to boost strategic emerging industries in central SOEs was formed in May. Within weeks, SASAC (State-owned Assets Supervision and Administration Commission) held joint work meetings with multiple science-focused state agencies. MoST minister Wang Zhigang 王志刚 says SOEs should catalyse basic research as ‘problem creators’ and ‘reviewers’.

The state’s readiness to invest heavily in strategic tech sectors such as semiconductors is assured. Success will hinge on Beijing’s mastery of the incentives. The potential to fuel tech triumphs is promising, but officials are on notice not to waste resources.
ENERGY

DOUBLING DOWN ON SECURITY

Energy security is a priority as the PRC bails out its post-lockdown economy. This means greater reliance on coal in the short to medium term. Both coal production and imports are at record highs. Energy efficiency and demand side management via ‘smart’ digital solutions are touted. The renewables rollout continues apace by way of large energy bases coming online and action to boost distributed solar and wind.

With the geopolitical situation ever less conducive to Beijing, it is flagging a need to secure strategic minerals, with mining firms urged to ramp up their search both at home and abroad and work with high-end consumers to use them efficiently.

BREAKING IN A NEW POWER SYSTEM

Coal will remain an essential pillar of the power system for the foreseeable future. While its share is expected to decline relative to renewables, ‘clean’ and efficient use of coal is encouraged, balancing the power grid and securing supply when and where intermittent renewables are insufficient.

Thermal coal imports spiked in response to low prices from sources such as Australia, global gas price hikes, as well as persistent drought in southwest China. The drought meant hydropower output sputtered, increasing reliance on coal for power through the summer peak period.

Officials have taken actions to avoid the widespread electricity outages that plagued the country in 2021, while maintaining an eye on carbon peaking and neutrality goals. Major coal and coal power SOEs continue to struggle to be profitable, while CO2 emissions, flat through 2022, grew four percent y-o-y in Q1 2023.

A Blue Paper issued by the National Energy Administration (NEA) sketches a roadmap to the new power system (see chart below), highlighting power supply support, new energy development and application, large-scale layout and application of energy storage, and smart operation systems. A new push on power market reform is expected to kick off soon.

Three stages of development and their key traits

<table>
<thead>
<tr>
<th>Accelerated transition period (present-2030)</th>
<th>Overall formation period (2030-2045)</th>
<th>Consolidation and improvement period (2045-2060)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• renewables gradually make up bulk of incremental generation</td>
<td>• renewables gradually make up bulk of installed capacity</td>
<td>• renewables gradually become main component of power generation</td>
</tr>
<tr>
<td>• coal still the ballast stone of system security</td>
<td>• coal power accelerates its low carbon transition</td>
<td>• deep integration of secondary energy (electricity, hydrogen)</td>
</tr>
<tr>
<td>Grid</td>
<td>Grid gradually undergoes flexible, smart and digital transition</td>
<td>breakthroughs in power transmission and grid tech</td>
</tr>
<tr>
<td>• ‘west to east’ transmission model expands</td>
<td>• diverse grid tech applications integrated</td>
<td>close coordination between electricity generation, transmission and distribution</td>
</tr>
<tr>
<td>• distributed smart grid tech enters dev. phase</td>
<td>Users</td>
<td>transformation of generation and consumption relationship</td>
</tr>
<tr>
<td>• new power consumption models, end use electrification increases</td>
<td>• society wide electrification</td>
<td>user-side and power system have high degree of flexibility</td>
</tr>
<tr>
<td>• flexibility and demand response growth</td>
<td>• revolution in user-side decarbonisation, electrification, flexibility and smartness</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>• storage scales up with diverse tech, applications and settings to satisfy same-day balancing of demand</td>
<td>• breakthroughs in scaling up long-term storage</td>
</tr>
<tr>
<td>• breakthroughs in scaling up long-term storage</td>
<td>• balancing demand over periods longer than a day</td>
<td>diverse forms of energy storage covering entire periods will operate complementary with power systems</td>
</tr>
</tbody>
</table>

Source: National Energy Administration, ‘New Power System Development Blue Paper’

Ouyang Minggao 欧阳明高
EV100 chair and Tsinghua University Professor

China’s energy structure is currently undergoing transformative change, says Ouyang. However, solar and wind are still intermittent and unreliable, creating fluctuations in the grid and risking energy security. The means to ensuring energy security is energy storage. Battery energy storage can form a power ‘sponge’, Ouyang notes, with distributed energy storage through electric vehicle power batteries becoming increasingly viable.

Developing the energy storage sector requires clarifying the role of storage in the development of new energy sources, strengthening key tech R&D, building vehicle to grid (V2G) and vehicle to everything (V2X) communication infrastructure and improving the multi-level unified power market system, he suggests.
RENEWABLES ROLLOUT: DISTRIBUTED WIND AND SOLAR AND LARGE ENERGY BASES

For all the practical reliance on coal, renewables continue to roll out. Pilots for distributed solar and wind in rural areas were announced in March 2023, in addition to the country’s ambitious rooftop solar pilots for newly built and existing urban buildings. A number of large clean energy bases in desert areas are also slated to complete construction and come online in 2023, contributing the bulk of newly installed capacity.

BOOSTING THE DEMAND SIDE

Demand side management is hoped to yield more energy efficiency. For decades, meeting demand has trumped efficiency; now the importance of energy-saving measures comes into focus as the goal of peak emissions draws nearer, and the share of intermittent renewables in the energy mix increases.

Domestic energy consumption per unit of GDP is 1.5 times the world average. Key products and equipment will soon have energy efficiency standards.

THE STORAGE KEY

On the production side, new energy storage (i.e. exclusive of pumped hydro) is now deemed a prerequisite for expanding and integrating renewables, storing excess power and deploying it to the grid when needed.

While storage capacity has grown at an incredible rate, storage companies are struggling for profitability due to underutilisation. Power market reforms are required to pass on the costs of storage services, according to NEA chief engineer Xiang Haiping. 倪海平. Breakthroughs will also be needed in R&D.

Tsinghua University professor Ouyang Minggao says battery storage can form a ‘power sponge’. Solid-state battery tech is promising but has yet to become commercially viable, and hydrogen storage will likely be important while battery storage capacity remains low. Distributed battery storage, using the power batteries from the massive fleet of consumer NEVs and integrating them in a vehicle-grid network, looms large as a major next step in building a responsive, renewables-driven power system.
AGRICULTURE

FEEDING CHINA AFTER A PANDEMIC

A competitive agriculture sector may not be a central desire in how Beijing views China's rural economy post-COVID. But a strong call for this was delivered by the State Council's No. 1 Document, published on 13 February 2023. With a weak recovery and disrupted links with world breadbaskets, notably the US and the Black Sea region, PRC leaders frequently warn of ‘unprecedented’ change.

Food security remains sacrosanct. With expectations of another annual 650 million tonnes harvest, the 2023 target has been raised by another 50 million tonnes. This optimism was followed by moves to mandate food security via a new Food Security Law issued in June. The lockdown aftermath is clearly seeing an uptick in the political priority of food. There are several domestic trends to watch.

FOCUS ON BASICS

Corn and soybeans, the top crop imports that suffer the greatest yield gaps with best practice, are prime targets for research. Over the next decade, soybean and corn yields are envisaged to rise by up to 150 kg and 75 kg per ha.

Seed breeding, mechanisation and improving farming practice are top areas for state agriculture investment. International partners are encouraged, but R&D and especially genetic resources must stay in the PRC. This is another sector adversely affected by Beijing’s security agenda.

Declining grain acreage has prompted strict controls on the use of farmland. The latest, in a raft of regulatory moves, is the emergence of the notorious agriculture law enforcers (or nongguan), who are rezoning swathes of the land growing cash crops on which farmers depend for income. Sentiment is high that instead of penalising, the state should be incentivising farmers to stay on the land.

BIOTECH SOLUTIONS

With its own 14th 5-year plan, biotech is an area of top interest. Genetically modified organisms (GMO) are the most promising area. Lavish state funding and broad consumer acceptance underpinned rapid strides in GMO research in the early 2000s. But successive food safety scandals saw consumer confidence plummet, just as the state was losing confidence in the fraud-ridden research sector. The latter languished for well over a decade. An ever more acute shortage of feed grains, notably soybeans and corn, now supports a strong case for rapid commercialisation.

The focus has now turned to gene-edited crops that promise higher yields and resistance to agrochemicals and extreme weather. The first-ever biosafety certificate for a gene-edited soybean variety was approved in April 2023. Absent any external genes, these new crops are considered a safer option in designing new varieties and are regulated more loosely in advanced countries.

Liu Guozhong 刘国中
Vice-Premier

Soon after becoming vice-premier, Liu visited several local agriculture research centres, stressing the key role of R&D in raising agricultural productivity. Agriculture R&D directions, he pointed out, must stay in line with the most urgent need for grains and strategic commodities. He stressed, the ‘bottlenecks’ in agricultural R&D: seed breeding, high-quality ag machinery and farmland infrastructure, should be prioritised. He also confirmed the dominant position of smallholder farmers, who are and will continue to be the most important agriculture entities in PRC. To better educate small farmers, equipping them with the latest techniques developed in labs, requires a more efficient agriculture tech extension system.
AGRICULTURE CAUTIOUSLY GREENING

In line with carbon reduction goals, yet with food security as a precondition, the Ministry of Agriculture and Rural Affairs (MARA) released a plan for emissions reduction and carbon sequestration in the rural sector. With a tight time frame and a squeeze on public funds, the plan will be aspirational for a while but shows what may happen in the sector.

Paddy fields, which are the major source of methane, are a prime target for water-saving techniques and organic fertiliser. High-yield, low-emission varieties of rice can also help. Capacity to store carbon also needs to be maximised by improving soil quality and organic matter. Conservation tillage and other sustainable techniques with less disruption to soil and the surrounding ecosystem are likely to be promoted nationwide.

Curbing emissions from livestock digestion, which is another major source of greenhouse gases in the ag sector, low-protein feed formula and precision feeds are planned. Circular agriculture models should better link farmland practices and pasture and reduce production waste.

OPPORTUNITIES FOR AUSTRALIAN EXPORTERS

For all the moves to hike domestic food production, China’s mantle as the world’s largest food buyer is unlikely to be challenged. Years of strategically grooming emerging sources, above all BRI partners, have hardly moved the dial and a handful of countries still dominate grain imports. Despite its much-touted diversification moves, soured relations with the US and hostilities in the Black Sea, are forcing fence-mending with reliable suppliers. Australia’s competitive advantage in commodities, notably wheat and barley, is again its comparative advantage.

The pandemic has prompted progress in cold chain logistics at unintended speed. Beijing’s latest blueprint will link overseas sources with coastal provinces, then the broader hinterland. Fresh and processed Australian produce may reach urban buyers in central and western China and even untapped markets in smaller centres.

Design for cold-chain network linking producing and consumption regions

- Main production area
  - Great Northern Highway
  - Shandong Shannxi Tibet Highway
  - Yangtze River Highway
  - Southern Highway
- Main sales area
  - Western Highway
  - Beijing Hubei Fujian Highway
  - Erenhot-Guangzhou Highway
  - Eastern Coastal Highway
Beijing abruptly halted its stringent zero-COVID measures in December 2022. The ensuing challenges shone a spotlight on ongoing shortfalls in healthcare, especially in less developed regions. As the ageing population continues to strain care services, health and aged care reforms are speeding up. Central procurement and the national reimbursable drug list negotiations, which are Beijing's prime vehicles to curb healthcare spending, continue to shake up the pharmaceutical sector.

**BOLSTERING RURAL HEALTHCARE**

After lockdown restrictions were lifted, a flood of COVID infections pushed the healthcare system to the brink. Beijing's vision of a new system, with primary care mostly delivered via health centres and clinics below the county, remains aspirational.

When the COVID surge hit, a shortage of skilled staff and essential drug supplies stretched grassroots medical resources. Poor pay and tough working conditions keep driving capable doctors away, leading to dwindling trust in primary care providers. Fewer patients have been choosing local medical centres since 2013, according to domestic health thinktank, Latitude Health.

New central directives in February and March 2023 pledged to bolster rural healthcare. The focus was on growing the medical workforce, building treatment capacity, and embracing digital technology. Initiatives also involve sending medical professionals to villages for periods and introducing routine mobile healthcare. Yet financial constraints persist, with local budgets skewed towards larger hospitals.

**MANAGING AN OLDER POPULATION**

The swiftly ageing population demands urgent care support. It is estimated that by 2035, more than 20 percent of the population will be 65 or over (see chart below). Commercial pensions, the third pillar after state and employer-sponsored schemes, have made headway. Operational guidelines were issued in November 2022. Contributions are made pre-tax, but tax breaks have yet to boost participation.

As of March 2023, only nine million of the 30 million commercial pension participants had made deposits into their pension accounts, with deposits only averaging C¥2,000, far below the C¥12,000 annual limit. Income stagnation and job insecurity work against lower-income earners contributing, while doubts about investment returns also deter deposits, argues Sanlian Lifeweek columnist Xie Jiu 谢九.

In May 2023, a plan for strengthening basic aged care emerged, featuring capability assessments for those over 65 and funding for training family caregivers. Localities are encouraged to tailor care services based on local needs and budgets. A growing elderly cohort unable to perform daily activities presents a major challenge for providing long-term care. Subsidies often become mere cash outlays, failing to enhance the quality of care. Yangtze River Delta Regional Elderly Care Services Promotion Centre chairman Feng Jianguang 冯建光 says more diverse fundraising is needed.
AFFORDABILITY VS INNOVATION

Affordable healthcare hinges on expanding the NRDL and central procurement. Both programs are broadening. Strict price control will, it is feared, stifle PRC drug innovation. Leading pharmaceutical expert Chen Kaixian has identified an ‘80 percent dilemma’: 80 percent of hospitals not using new drugs, 80 percent price cuts during national negotiations, and a sharp 80 percent decline in investor confidence.

Pharma companies are compelled to lower their prices even further to stay on the list. This often results in new drugs underperforming in the market and struggling to recoup R&D costs. Hospitals, under pressure to limit the share of drug sales in revenues, may hesitate to procure expensive new drugs.

Many PRC biotech firms are suffering financial stress, leading to cutbacks in R&D investment and research projects, reports Caijing Magazine. Furthermore, access to imported original drugs has stalled as central procurement favours cheaper local generics. In the absence of adequate clinical performance monitoring, experts warn against broad-brush replacement of original drugs with generics.

LOOKING AHEAD

As Beijing grapples with an ageing population and skewed healthcare provision, the task at hand is to improve primary healthcare and services for the ballooning elderly population. Amidst aspirations to become a global pharmaceutical powerhouse, policymakers must balance affordable healthcare, drug innovation, and accessibility, as NRDL and central procurement expand their reach. Ultimately, reforms must prioritise equitable care for all, with emphasis on improving provisions for the often marginalised rural communities.

Mounting aging population strains care system

Source: Yicai

<table>
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Percentage of total population vs. population (100 million)

Source: Yicai
EDUCATION

PRODUCTIVITY AND PATRIOTISM

With the population shrinking, Beijing's focus is on upskilling the labour force to maintain productivity. As geopolitical rivalry heats up, scitech self-reliance has become central in setting the education agenda. This is coupled with ever-growing ideological education amid rising risk aversion in Xi Jinping's third term.

COVID's economic repercussions have also pushed some households to cut spending on overseas study. Southeast Asia has become popular for K-12 students, although the prestige of top-tier UK and US universities continues to attract those seeking higher education.

SUPPORTING SCITECH SELF-RELIANCE

Becoming an education 'powerhouse' is intended to shore up a skilled and capable workforce. This entails stronger science, engineering, and interdisciplinary education to boost national competitiveness and meet strategic goals, Xi told the Politburo on 29 May 2023.

More science education is coming to the curriculum for students in years 1-12. New guidelines (29 May 2023) focus on upgrading science subjects, integrating cutting-edge technology into lab teaching, and building partnerships between schools, institutions, and firms. Tutoring agencies, not long ago vilified for burdening students with too much work, are now encouraged to provide after-class scitech education. Yet funding constraints could hold back schools wishing to collaborate with private operators.

In higher education, 20 percent of university majors will be restructured by 2025. The reshuffle addresses skill shortages in fields like high-end manufacturing and intelligent healthcare. More interdisciplinary studies are underway, blending arts, medicine, agriculture, and engineering. Nevertheless, bureaucrats hamper universities' moves to innovate, as program changes need Ministry of Education approval, leaving them with limited autonomy.

Meanwhile, strong central backing for vocational education remains. A December 2022 framework encourages provincial initiatives and industry-education alliances in strategic sectors, such as biotech, information technology, and renewable energy. But young people are proving reluctant; their aversion to factory jobs sees vocational graduates prefer work in emerging fields like live-streaming and e-sports. Others are using vocational education as a stepping stone to academic degrees. As a result secondary vocational enrolments continue to fall.

MORE IDEOLOGICAL EDUCATION

National security and defence rhetoric have escalated since the 20th Party Congress in October 2022. Underpinning Xi’s third term, growing security tensions and the increased emphasis on patriotism and national unity is bringing more ideology to the classroom.

Beijing is rolling out initiatives to promote national defence education (NDE), intended to cultivate a martial spirit, a holistic view of national security, and a love for the military, Party and nation. Instilling a national defence mindset in school-age youth is the aim. NDE will become part of secondary and higher education. More than 2,600 'NDE model schools' have been set up as of February 2023, enabling military engagement in the classroom.

A revamp of ideological and political education is in train, extending beyond the conventional curriculum. Programs range from enhancing moral development and ethical awareness in primary school, to developing a solid ideological understanding in middle school, building political literacy in high school, and to strengthening a sense of duty and responsibility towards national development at university.

Yao Yang 姚洋
Peking University National School of Development dean

Yao observes a chronic mismatch between PRC education output and market needs. In terms of higher education, Yao champions Peking University’s Yuanpei program, which allows students to delay choosing their majors, offering a liberal arts model. Still, resource constraints and a persistent focus on job-oriented education make this model difficult for most schools to adopt, Yao admits.

He believes the current practice of directing students into academic or vocational tracks post-high school entrance exams is outdated. This should be replaced by a universal high school system, while vocational education should shift from manual tasks to enhancing students' cognitive and creative capabilities, better preparing them for an AI-driven society, Yao argues.
TRENDS IN OVERSEAS EDUCATION

Post-pandemic reopening and the resumption of overseas travel have led to a surge of students leaving to study overseas. The 2023 China Study Abroad White Paper from New Oriental Education indicates that these students are younger and from middle-income families (see chart below).

Yet bleak economic prospects are causing some families to pause. Economist Xu Jin 徐瑾 notes that the rising cost in countries like the UK and US, along with an ever-competitive job market at home, make studying abroad less affordable and riskier. Yet, despite tightening budgets, education remains a resilient household priority. Families may opt for more affordable programs.

A noticeable trend is the growing preference for destinations closer to home, including Hong Kong and Southeast Asia. In Q3 2022, Malaysia witnessed a five percent y-o-y increase in PRC students. Despite this regional shift, the UK and the US managed to hold on to their top spots in 2023.

Thai international schools have become popular for K12 studies, with some recording a 200 percent increase in PRC students between 2021–22. Drawn by the country’s lower living costs and a less stressful schooling environment, families see Thailand as a stepping stone towards top schools in the UK and the US.

LOOKING AHEAD

Studying abroad holds steady allure, as degrees from top global schools yield job prospects back home. Beijing’s industrial upgrade agenda suggests further support for STEM studies is on the horizon. The pace of domestic education reform, designed to ready students for a fast-changing world, may also play a key role in overseas study demands. As it stands, the perceived advantage of overseas education still drives many parents to send their offspring abroad, unconvinced that test-centric domestic schools can sufficiently prepare them for an uncertain but tech-dominated future.
A NEW REALITY FOR AUSTRALIA-CHINA BUSINESS TIES

Typically, the release of a Five-Year Plan allows business to identify opportunities to align itself with China’s economic trajectory. However, the adoption of China’s 14th Five-Year Plan in March 2021 came at a fraught time for Australia-China relations. Ministerial contact was non-existent and export industries were facing punitive trade measures. The relationship was at a low.

Against the backdrop of an increasingly competitive US-China relationship and a global pandemic, the framing of Australia’s already complex trading relationship with China shifted sharply from opportunity to risk. This proved a reckoning for Australian business, confronted with the reality of China as it is today, rather than the China it wished for.

Coal, barley, beef, cotton, wine, lobsters, and grapes were hit with restrictions of varying degrees. Some industries were left more exposed than others, with wine and lobster struggling to find alternate markets. Other affected categories either found alternative markets or saw their goods increase in value. Despite the disproportionate impact of the trade measures, as a whole, Australian exports proved resilient with goods and services to China increasing by 6.3% from 2020 to 2021.

The election of the Albanese Government has provided an opportunity to stabilise the relationship. Both the government and business continue to see China as an opportunity, albeit one that must be treated with enhanced caution. Australia’s Foreign Minister has remarked that Australia shall “cooperate where we can, disagree where we must, and engage in the national interest.”

The government’s approach has shown early signs of promise with the reestablishment of ministerial contact restoring market access for cotton, coal, barley and timber. Calls for diversification also appear to be gaining traction with China’s share of Australian exports, 42.1% in 2021, falling below 30%, showing that exporters have had success in finding other markets.

Yet, the inherent complementary nature of the two economies means Australian business will continue to strive for commercial opportunities in China despite the need to balance risk (whether it be of a sovereign, geopolitical or individual nature).

And Australia is not alone in looking to ‘de-risk’ from the China market as the European Union has implemented policies to establish guardrails against a more unpredictable China. The United States, sensitive to losing its advantage in the strategic industries of semi-conductors, AI and green technology, has taken a more direct response by introducing industrial policy domestically and foreign investment controls abroad to protect its industries. The US would like to see Australia follow suit but as a smaller, more trade exposed economy, Australia will look to take a more cautious approach than its AUKUS ally.

Ideally, the Albanese Government would like China to treat it independent from its relationship with the US. That may be optimistic with China showing a reluctance to separate issues apart from the greater geopolitical competition (as demonstrated by the failed attempts by the US to segment the topic of climate away from the broader strategic rivalry). China has expressed an unwillingness in allowing the West to confront it strategically while at the same time pursue opportunities within its economy.

Xi Jinping has sought to make China’s economy less reliant on the West, including through industrial policy and by favouring Chinese domestic producers. An increasingly state-dominated environment has made things difficult for China’s private sector. The economy is also gripped by challenges stemming from debt in the property sector, demographic challenges and post-COVID consumer constraints.

Despite these geopolitical and economic headwinds, China’s economy and middle class will continue to appeal to Western business. Adjusting to the delicate balance between opportunity and risk means Australian business will have to navigate this period of stabilisation with great caution.
ASIA SOCIETY AUSTRALIA

Asia Society Australia is a business and policy think-tank and membership organisation dedicated to Asia. We are a national, independent, non-partisan, and non-political institution with a national centre in Melbourne, an office in Sydney, and programs accessible in Australia and globally through digital and face-to-face platforms. Asia Society Australia is a centre of Asia Society – a preeminent global non-profit organisation dedicated to Asia, founded in 1956 by John D. Rockefeller 3rd, with centres in New York, Delhi, Hong Kong, Houston, Los Angeles, Manila, Melbourne, Mumbai, Paris, San Francisco, Seattle, Seoul, Sydney, Tokyo, Washington, DC and Zurich.

CHINA POLICY

China Policy is a globally recognised research and strategic advisory, headquartered in Beijing. The team tracks and maps agendas, people and agencies shaping policy development and execution. Working with public, corporate, and non-profit clients, it builds strategic thinking on policy process and risk. China Policy’s strength lies in its macro approach, the breadth of its Chinese-language evidence base, and its principals’ decades of first-hand China experience. It delivers nuanced insight into China’s policies and development trajectory now impacting strategic and operational decision-making across the globe.

NATIONAL FOUNDATION FOR AUSTRALIA-CHINA RELATIONS

The National Foundation for Australia-China Relations is an Australian government initiative, established in 2020, to strengthen understanding and engagement between Australia and China. We are a national platform that works across business, government and communities to strengthen constructive engagement with China and build links across greater China. Working with others, we provide practical support and expertise, facilitate connections, commission research, and coordinate training and exchange programs. Through our annual grants program, we support Australian individuals and organisations to develop, promote and strengthen understanding and engagement between Australia and China, including at the business and community level, in support of Australia’s national interests.

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