

# The Reinvention of Development Planning in China, 1993–2012

Modern China  
39(6) 580–628  
© The Author(s) 2013  
Reprints and permissions:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/0097700413497551  
mcx.sagepub.com



**Sebastian Heilmann<sup>1</sup> and Oliver Melton<sup>2</sup>**

## **Abstract**

In studies of China's economic rise and political system, multiyear comprehensive and sectoral plans issued by the national government tend to be played down as futile efforts at reigning in a political economy increasingly driven by market incentives and decentralized decisions. Contrary to this, we provide evidence that China's planning system has been transformed alongside the economic transition, yet remains central to almost all domains of public policy making and the political institutions that have fostered China's high-speed growth and economic stability. The incorporation of experimental programs into macro-plans, a tiered hierarchy of policy oversight, newly introduced mid-course plan evaluations, and systematic top-level policy review have allowed Chinese planners to play a central role in economic policy making without succumbing to the rigidity traps that debased traditional planned economies. By better understanding how the planning cycle influences incentives and resources of successive layers of bureaucracies and jurisdictions, and how it updates itself and adapts to new challenges, it is possible to explain a greater proportion of the Chinese policy-making process, including many of its successes and pathologies.

## **Keywords**

China, planning, five-year plan, planning cycle, policy making, policy process, policy review, experimental governance, adaptive capacity

---

<sup>1</sup>Mercator Institute for China Studies, Berlin, and University of Trier, Trier, Germany

<sup>2</sup>U.S. Department of State, Washington, DC, USA

## **Corresponding Author:**

Sebastian Heilmann, Department of Political Science, University of Trier, 54296 Trier, Germany.

Email: heilmann@uni-trier.de

In Western studies of China's economic rise and political system, the uses and impact of planning processes in policy coordination are widely ignored. The "demise of the plan" and the "transition from plan to market" are taken for granted as the determining trajectory of China's transformation (see, e.g., Chai, 1998; Liew, 1997). Recent comprehensive treatises of China's economic rise mention state planning only in passing or not at all (Brandt and Rawski, 2008; Huang, 2008; Naughton, 2007; Chow, 2007). Chinese multiyear programs tend to be played down as futile efforts at reigning in a complex and dynamic economy, or as outright symbolic gestures without any potential for meaningful implementation. Consequently, academic debates have concentrated on market liberalization, regulatory reform, the privatization of state-controlled enterprises, private entrepreneurship, and ownership rights.<sup>1</sup>

Contrary to this widely shared focus, we will argue in this article that a "demise of the plan" has not taken place in China. From 1993 on, development planning has been fundamentally transformed in terms of function, content, process, and methods. It has provided room for market forces and the decentralization of decision-making authority, while preserving the state bureaucracy's ability to influence the economy and ensuring that the party has retained political control even as it has abandoned many of its former powers.

China's planning system evolved alongside the economic transition and remains central to almost all domains of public policy making and the political institutions that have fostered China's high-speed growth and economic stability. Moreover, the planning system adds a new dimension to studies of China's political system by emphasizing the oscillating nature of central-local interactions and the complexity of institutional authority and autonomy. Rather than a vestige of the planned economy that operates in the background of political and economic life, the planning system is one of the driving forces of policy makers' priorities, adjusting parameters and mandates of institutional authorities, and shaping political relationships at all levels of government. More specifically, as our case study will show, the planning system has been at the center of efforts to tackle persistent problems of governance, such as China's severe environmental challenges.

### **Growing Out of the Plan: 1978–1993**

Despite the pervasiveness of mid- or long-term, cross-sectoral, and sectoral programs in Chinese policy making, detailed studies of post-Mao development planning are extremely scarce.<sup>2</sup> Only individual non-mainstream (i.e., not widely read and quoted) studies point to the significance of remolded

planning approaches for the pace and pattern of China's development, yet mostly without entering into extended primary research (Bramall, 2009: 473–74; Melton, 2010).

A widely accepted explanation of plan-market dynamics in post-Mao China was given by Barry Naughton in his book *Growing Out of the Plan* (Naughton, 1995). He argued that the rapid growth of the non-planned economy in the 1980s and early 1990s, along with simultaneous stagnation or decline of the state-dominated planned sector, reduced the importance and range of state planning and facilitated the emergence of an increasingly market-dominated economy. The “growing out of the plan” framework is, however, focused on explaining the atrophy or reduction of certain core features of old-style socialist planning, such as innumerable mandatory targets, material supply balances, direct state allocation of resources, and state control over investment, credit, prices, and foreign trade.

This narrative is not incorrect, but it is incomplete. Over this period, the central government curtailed its commanding role, delegated many powers over economic administration to local governments, and emphasized the decision-making autonomy of enterprises. As the non-command segments of the economy grew, Soviet-style planning became less relevant and was effectively abandoned in the mid-1990s.

However, the “growing out of the plan” narrative should be viewed mainly in terms of the role of market forces within the economy; it does not help explain the resilience of multiyear planning in China's political economy and the administrative efforts that have been undertaken since 1993 to remodel and reorient China's planning system to master profoundly novel tasks and circumstances. Nor does it explain why the five-year plan remains central to a wide range of public policy initiatives, such as environmental protection or education policy, as well as China's industrial policy initiatives.

Importantly, during the 2000s, the role of planning was actively reinvigorated and institutionalized as it reemerged as a central component of economic and public policy coordination and oversight. A new type of binding targets 约束性指标 was introduced in the Eleventh and Twelfth Five-Year Plans (2006–2010 and 2011–2015) to reinforce party influence over administrative action, especially in disputed spheres, such as environmental protection and land management (Tian, 2010). And the renewed importance of planning in economic policy was highlighted when Premier Wen Jiabao stated in a State Council meeting that no investment project would be approved if it was not incorporated in a multiyear program 没有规划就不批项目.<sup>3</sup>

China's post-1993 “new-style development planning system” 新型发展计划体制 (Li and Li, 2001) has been geared to identify and support the growth potential offered by domestic and global *markets* and thereby has indeed

moved further and further away from Soviet-style administrative resource management. Yet, in response to the macroeconomic stability challenges of the early 1990s and the political concerns that arose from economic and political decentralization, the party leadership under Jiang Zemin and Zhu Rongji launched a series of reforms aimed at increasing central authority while preserving the flexibility of a market-oriented system. The decentralization of economic decision making and policy implementation of the 1980s served to mobilize local knowledge and to promote policy innovation. But it threatened Beijing's control over macroeconomic policy. New-style planning tackled this problem by creating a dynamic, nested hierarchy of policy authority.

Despite the transformation to a market-oriented economic system, the very essence of state development planning has been preserved in China as a governmental effort at *strategic policy coordination* (prioritizing and coordinating state policies from an anticipatory, long-term, cross-sectoral perspective); *resource mobilization* (mobilizing and pooling limited resources to bring about structural changes identified by policy makers as necessary to achieve sustained economic and social development); and *macroeconomic control* (controlling the level and growth of principal economic variables to achieve a predetermined set of development objectives, prevent severe cyclical fluctuations, and contain the effects of external shocks) (see Todaro and Smith, 2006: 518; Mohan and Aggarwal, 1990: 682).<sup>4</sup> In addition, as our section on the “plan-cadre nexus” will show, policy targets established through the planning system have become crucial to the party's management of cadre incentives, as a way to improve policy compliance and the quality of local governance in accordance with goals set by the national leadership.

## Redirecting Plan Functions

As a result of explorative reorganization of planning institutions and controversial debate in the early 1980s, central ministerial resource allocation was drastically reduced starting from 1984 (Chen, 1984; Yabuki, 1995: 32–34). Though imperative planning was not given up in those sectors that political leaders identified as “commanding heights” or “lifelines” 命脉 of China's political economy, it came to be combined with more decentralized and enterprise-based forms of “guidance planning” 指导计划 (a transitional institutional arrangement that strengthened enterprise decision making while upholding administrative control over aggregate resource flows) in light industry sectors and with increasingly market-driven allocation in the rapidly growing realm of consumer goods (Hsü, 1986: 383; Naughton, 1990: 743–44; Liu, 2006: 145, 347–49). Though long-term planning was identified as a major goal in the reform documents of the 1980s, the predominance of

operative annual planning over programmatic five-year plans inherited from the Mao era was not broken by the reforms undertaken between 1984 and 1992, even as the role of the market slowly subsumed many of the former functions of the planning apparatus (Gui et al., 1994; Shi et al., 1993).

For understanding the emergence of the new-style development planning system that was established in China since the early mid-1990s and consolidated in the 2000s, the initial years of introducing a “socialist market economy” after 1992 are of particular importance. A radical reorientation and reorganization of the planning system was launched by a Central Committee decision in fall 1993. While planning had been seen and used as a *substitute for markets* previously, Chinese administrators were now charged with the task to “take markets as the foundation” 以市场为基础, that is, to *plan with and for markets*, to absorb major trends in domestic and global markets into multiyear government programs. Yet, instead of abolishing plans and planning bodies altogether, planning was redefined as one of three key mechanisms of “macro-control” 宏观调控 along with fiscal and monetary policy, which was supposed to facilitate “comprehensive coordination” 综合协调 and “aggregate balancing” 总量平衡 of economic activity. Instead of fixing a huge number of quantitative targets and control figures, planners were ordered to focus on macroeconomic, strategic, and policy issues and refrain from giving orders to departments and regions. Plan functions were curtailed and redirected to give macro-guidance to the transformation of the economic structure along with market-oriented industrial policies (CCP Central Committee, 1993; Li and Li, 2001).

Reformers within the State Planning Commission stated in an elaborate report on the implementation of plan reform that the “basic function of plan coordination” lay in “maintaining overall balance of supply and demand in society and general coordination of the major proportional relationships 重大比例关系 in the national economy, providing a good environment for fair market competition” and “complementing the deficiencies of market coordination” (Gui et al., 1994: 72–76).

In preparing the Ninth Five-Year Plan for the 1996–2000 period, policy makers and planners made a serious effort to put the “new method of plan making” 作计划的新方法 into practice.<sup>5</sup> The plan had to explicate new approaches and policies for economic restructuring and transformation. Plan targets were given as aggregates and communicated as prognostic-indicative, no longer imperative. Except for a small number of particularly large national investment projects, individual projects were not written into the five-year plan anymore. By the late 1990s, the traditional Soviet-style attachment to the plan that listed all major investment projects to be undertaken within the five-year period was completely missing in the reformed plan set-up. Instead,

government-sponsored projects were supposed to be dealt with on a year-by-year basis through annual plans and budgets (Li Peng, 2007: 1206–08). Nearing the end of the Ninth Five-Year Plan, amid the fallout of the 1997–1999 Asian financial crisis and the rapidly shifting economic environment, the newly installed premier, Zhu Rongji, finally eliminated altogether the practice of setting imperative economic targets (Chang, 2006: 658).

In preparing the Tenth Five-Year Plan for the 2001–2005 period, the Zhu Rongji government went further and defined new strategic norms for plan formulation by stating that the government is “no longer the main force in resource allocation.” Instead, growth should be stimulated through market signals and competition. The focus of planning should therefore shift from setting narrow, quantitative growth targets to guiding and coordinating structural and qualitative changes in economic and social development, such as promoting the services sector, domestic demand, environmental sustainability, rural urbanization, and development in the west. Moreover, the Tenth Five-Year Plan identified science and technology as well as human resources as decisive for China’s catch-up with the most advanced societies (Zhang and Lu, 2006: 665–67, 674–77).

China’s 2002–2003 leadership transition came as the government began to shift its attention from fundamental economic restructuring to the improvement of administrative functions and the provision of basic public services, such as social welfare and environmental regulation. In contrast to Premier Zhu Rongji, who was skeptical of the effectiveness of comprehensive planning and of the reorganized planning bodies in particular,<sup>6</sup> the Wen Jiabao government found the planning system useful for the coordination of long-term economic, social, technological, and environmental development programs, and put a renewed trust in the planners. During a Central Committee plenum in November 2003, Wen introduced the programmatic slogan of the “Five Comprehensive Coordinations” 五个统筹, which served to outline the Communist Party’s priorities of coordinated and controlled, “harmonious” and “scientific” development: the mitigation of urban-rural, interregional, social-economic, human-environmental, and domestic-international imbalances and contradictions that the party is unwilling to leave to a free-wheeling evolutionary process (see CCP Central Committee, 2003).<sup>7</sup>

In addition to the shifting emphasis of the Eleventh Five-Year Plan, there were important reforms to its structure and the relationships between central and local plans, as well as the different types of plans themselves (discussed in detail below). As a result of the internal (unpublicized) mid-term evaluation of the Tenth Five-Year Plan in 2003, important innovations were included in drafting the Eleventh Five-Year Plan that actually constituted a major revision of the functions and means of planning established in the mid-1990s

(Ma, 2006; Hu, Wang, and Yan, 2008; Zhu, 2009; Xu, 2010). A terminological change from the traditional “imperative plan” 计划 to a more flexible “coordinative plan” 规划 was undertaken to mark the difference with previous administrative resource allocation, though this terminological change was actually proposed by National Development and Reform Commission (NDRC) planners in preparation for the Tenth Five-Year Plan to indicate the earlier break from socialistic planning. Eventually, top leaders approved the new term only in the run-up to the Eleventh Five-Year Plan.<sup>8</sup>

More importantly, along with anticipatory, indicative targets 预测性指标, a new category of binding targets 约束性指标 was introduced in the Eleventh Five-Year Plan and expanded in the Twelfth (see Table 1). As opposed to socialistic imperative plan targets and quotas of earlier times, these binding targets were now directed specifically at government bodies and seen as “government promises” 承诺, increasingly in public service provision and areas like environmental and land use policies, rather than direct intervention in the economy (see Yang, 2003, 2010). This final step, discussed in detail below, led to a direct link between China’s top policy priorities and the party’s control over the leaders of major institutions and state-owned enterprises, the plan-cadre nexus.

## Hierarchy and Process

The five-year plan begins with brief, fairly general *guidelines* 建议 approved by the Communist Party Central Committee in the fall of the year before the start of the plan period, and with a more detailed—but still fairly broad—*outline* 纲要 approved by the National People’s Congress the following March. Collectively, they set national priorities and outline how they will be met, but these documents—which are commonly referred to as the five-year plan—are only executed through a network of thousands of sub-plans that evolve into detailed execution instructions for all levels of government. This web of plans evolves over the entire five-year period, and is better thought of as a planning coordination and evaluation cycle rather than a cohesive, unified blueprint. The planning system’s layered and nested programs can be found in almost every single policy domain in China and across three core levels of government: the center, provincial-level jurisdictions, and cities or counties 市县级.

The relationships between multiple planning efforts were formalized by the State Council in 2005. Beyond the most prominent five-year plan outlines for national and local governments, there are three distinct types of sub-plans that are released in successive waves throughout the planning period. This national triple structure of comprehensive plans 总体规划, special plans 专项规划,

**Table 1.** Binding and Indicative Targets of the Eleventh and Twelfth Five-Year Plans.

	Eleventh Five-Year Plan (2006–2010)	Twelfth Five-Year Plan (2011–2015)	
Economic growth			
GDP	7.5% annual growth	Indicative	7% annual growth
Per capital GDP	6.6% annual growth	Indicative	N/A
Economic structure			
Service industry/GDP	3 ppt cumulative growth	Indicative	4 ppt cumulative growth
Employment in service industry/Total employment	4 ppt cumulative growth	Indicative	N/A
R&D spending / GDP	0.7 ppt cumulative growth	Indicative	0.4 ppt cumulative growth
Patents/10,000 people			
Urbanization rate	4 ppt cumulative growth	Indicative	1.6 ppt cumulative growth
			4 ppt cumulative growth
Population, resources, environment			
Population	<8% cumulative growth	Binding	<7.2% cumulative growth
Energy consumption per GDP unit	20% cumulative reduction	Binding	16% cumulative reduction
CO <sub>2</sub> emissions per GDP unit	N/A		17% cumulative reduction
Non-petro chemical energy/Non-renewable energy	N/A		3.1% cumulative increase
Water consumption per unit of industrial value added	30 ppt cumulative reduction	Binding	30 ppt cumulative reduction

(continued)

Table 1. (continued)

	Eleventh Five-Year Plan (2006–2010)	Twelfth Five-Year Plan (2011–2015)
Effective irrigation (utilization coefficient)	0.05 ppt cumulative increase	Indicative
Rate of comprehensive use of solid industrial waste	4.2 ppt cumulative increase	Indicative
Total acreage of cultivated land	0.3% cumulative reduction	Binding
Major pollutants:	10 ppt cumulative reduction	Binding
Sulfur dioxide	Not initially specified	
Chemical oxygen demand	Not initially specified	
Ammonium nitrate	N/A	
Nitrogen oxide	N/A	
Forest coverage	1.8 ppt cumulative increase	Binding
Total stock of forest	N/A	
Public services, people's livelihoods		
Average years of education	0.5 years (to 9)	Indicative
Enrollment in higher education	N/A	
		0.03 ppt cumulative increase
		No cumulative change
		8 ppt cumulative reduction
		8 ppt cumulative reduction
		10 ppt cumulative reduction
		10 ppt cumulative reduction
		1.3 ppt cumulative increase
		600 billion sq m increase
		N/A
		4.5 ppts (to 87%)
		Indicative

(continued)

**Table 1. (continued)**

	Eleventh Five-Year Plan (2006–2010)	Twelfth Five-Year Plan (2011–2015)
Complete rate of compulsory education (9 years)	N/A	3.3 ppts (to 93%)
Coverage of urban basic old-age pension	100 mn increase in coverage	100 mn increase in coverage
Coverage of the three-point rural medical care system	56.5 ppt increase in coverage rate	3 ppt increase in coverage rate
New social housing	N/A	36 million units
New jobs created for urban residents	45 mn jobs created	45 mn jobs created
Rural laborers transferred to nonagriculture sectors	45 mn people	N/A
Urban unemployment rate	Indicative	Indicative
Per capita urban disposable income	5% annual growth	Lower than 5% >7% annual growth
Per capita rural net income	5% annual growth	>7% annual growth
	Indicative	Indicative

Source: State Council, 2006a; State Council, 2011.

Note. ppt = percentage point

and macro-regional plans 区域规划 is then replicated in a complex, interlocking web of development programs at the provincial, municipal, and county levels (see State Council, 2005; Yang, 2010). Additionally, they play a coordinating role among central bureaucracies and their local counterparts, and frequently serve as the foundation for similar plans at lower levels of government. Cross-provincial macro-regional plans, which are also replicated inside of provinces among cities and regions, play a major role in coordinating regional development objectives among diverse regions. The three types of plans collectively form a complex framework that shapes the priorities of policy makers throughout the government (see Yang, 2010; Cheng, 2004). These plans contain policy prescriptions, but are still only implemented through detailed follow-on instructions, fiscal outlays, and individual policy decisions. Though often overlooked, they are the core link between the macro-level aspirations of the plan outline and the policy actions of Chinese bureaucracies.

## Regional Planning

One of the most important and tangible aspects of China's planning system is the effort to coordinate regional economic growth, with an emphasis on spreading the gains of economic development to poorer parts of the country as well as within wealthier coastal provinces, and to guide China's massive urbanization drive and investment in infrastructure.

In a process that typifies the system of nested authority and "planning and experimentation under hierarchy,"<sup>9</sup> these structures are paralleled at each stage: the center actively coordinates macro-regional planning, but it also must approve and authorize intra-provincial planning, with city and multi-city regional planning approved by the State Council. Efforts to align regional interests with national objectives through particularistic contracting (most visibly in the authorization of special development and technology zones or recently in central government-sponsored macro-regional development plans) have been a common practice in China's political economy since the 1980s.<sup>10</sup> In the 2000s, new forms of contractual planning, especially in technology policy, were established between central ministries and provincial-level governments (see Heilmann, Hofem, and Shih, 2013). But a much more comprehensive initiative for aligning central and regional development policies through joint programs has been made by launching a series of macro-regional, cross-provincial plans.<sup>11</sup>

A new wave of ambitious, centrally sponsored macro-regional plans (Table 2) was introduced with the Western Development Program launched at the end of the 1990s and supported by massive central investments in infrastructure and other development bottlenecks in the western regions of China.

**Table 2.** Macro-Regional Plans and Experimental Schemes.

Programs	Decentralized experimental schemes authorized explicitly (selection)
Western Development Program for the Eleventh Five-Year Plan period 西部大开发“十一五”规划 (as adopted in March 2007)	<ul style="list-style-type: none"> <li>• Circulatory (recycling-based) economy</li> <li>• Agricultural technology dissemination</li> <li>• Urban-rural integrated economic administration</li> <li>• Human resources</li> </ul>
Northeast Revitalization Program 东北地区振兴规划 (as adopted in August 2007)	<ul style="list-style-type: none"> <li>• Organizational and technological transformation of local industrial structure</li> <li>• Economic restructuring in natural resources-based cities</li> <li>• Circulatory (recycling-oriented) companies and districts</li> <li>• SME credit issuance</li> </ul>
Pearl River Delta Program 珠江三角洲地区改革发展规划纲要 (2008–2020) (as adopted in January 2009)	<p>24 experimental schemes outlined and authorized, e.g.:</p> <ul style="list-style-type: none"> <li>• Administrative reorganization and reform of government investment</li> <li>• Financial market reforms</li> <li>• Technological innovation through integrated R&amp;D production bases</li> <li>• Urban-rural integrated administration and land-use management</li> <li>• Reform of public hospitals</li> </ul>
Yangzi River Delta Program 长江三角洲地区区域规划 (as adopted in May 2010)	<p>25 experimental schemes outlined and authorized, e.g.:</p> <ul style="list-style-type: none"> <li>• Information industry</li> <li>• Urban-rural integrated administration and land-use management</li> <li>• Property (real estate) and environmental taxes</li> <li>• Funding of cross-provincial infrastructural and environmental projects</li> <li>• Comprehensive management of lakes and rivers; local low-carbon economies</li> <li>• Promotion of private sector</li> </ul>
Central Regions Program 促进中部地区崛起规划 (as adopted in August 2010)	<p>14 experimental schemes outlined and authorized, e.g.:</p> <ul style="list-style-type: none"> <li>• Land-use management</li> <li>• Environmental support funds for priority river management</li> <li>• Public hospitals and old age insurance</li> <li>• Coal industry regions' sustainable development</li> <li>• Cross-provincial collaboration projects</li> </ul>

Source. Macro-regional development plans as given on the NDRC homepage [www.ndrc.gov.cn](http://www.ndrc.gov.cn). Included are experimental schemes and zones mentioned in the plan documents that are given explicit authorization to set up experimental points 试点, policy experiments 试验, or demonstration models 示范.

While programs for the western region and for Central China were directed at balancing disparities between China's interior and coastal areas, other macro-regional programs launched during the past decade were aimed either at comprehensive industrial restructuring (Northeast revitalization program), at promoting world class industrial and service sector clusters (Yangzi Delta program), or at more effective cross-border collaboration and division of labor among the economic powerhouses of the Cantonese economic area (Pearl River Delta program, including Hong Kong and Macau). The Western and Northeastern development programs were given the elevated status of national-priority tasks through the establishment of top-level leadership groups with administrative offices under the NDRC. Moreover, the programs can be differentiated based on their projected duration, principal goals, and funding channels. Many missions and goals defined in the programs transcend provincial boundaries and thereby necessitate the central government's coordination (Chung, Lai, and Joo, 2009).

Macro-regional development plans can be characterized as implicit contracts since the central government lays down the functions of the macro-regions within the national development strategy and at the same time authorizes the regional governments to try out novel ways and means to achieve the goals defined in the plans. For plan implementation, central funding and investment plays a supportive (Northeast and Central China) or even paramount (Western China) role. For the economically advanced Yangzi and Pearl River Delta regions, the macro-regional programs do not necessarily imply central funding but are invaluable as an "imperial sword" 尚方宝剑, that is, as an official authorization of local development ambition and discretionary policy-making powers (interviews with planning officials and advisors in Guangzhou and Shenzhen, 2009 and 2011). Local initiatives are often supported by national projects, such as the large-scale investment in infrastructure linking Chongqing and Chengdu to the coast, or regulatory coordination, such as limits on new financial centers meant to focus resources and clustering in Guangdong and Shanghai (and, to a lesser extent, Tianjin).

Interviews with planning officials in Chongqing and Guangdong made it very clear that from the perspective of provincial-level administrators such centrally authorized, regional development programs can provide significantly augmented policy capital and flexibility relative to broader national five-year plans or even national laws and regulations since these plans are understood as "red-letterhead documents that govern other red-letterhead documents" 管红头文件的红头文件, thereby providing both policy safeguards 政策保障 and policy discretion to "go ahead of the rest and try new things out" 先行先试 (interviews at Guangdong Province Development Research Center, 2010).

While Chongqing municipality was designated by the central government to serve as a multifunctional “dragonhead” for western China’s development (as a hub for transport, education, science and technology, etc.), it has benefited massively from extensive central government policy authorizations and fund allocations for the transformation of the Three Gorges Dam area and as one of only two National Experimental Zones for Integrated Urban-Rural Development (since June 2007) that are supposed to experiment with the thorny issue of *hukou* (urban-rural household registration) reforms and to inform national policy-making in this area (State Council, 2009; interviews at NDRC and Chongqing Development and Reform Commission).<sup>12</sup> The Pearl River Delta program resulted from a cross-jurisdictional initiative that involved core locations of China’s export economy and nine economically and administratively extremely diverse jurisdictions (including Shenzhen, Hong Kong, and Macau).

It is a remarkable feature in the making of both the Chongqing and Pearl River development programs that the central government, in the guise of large NDRC-led State Council delegations sent out from Beijing, monopolized the plan drafting process. Regional governments were asked to submit proposals, statistics, and research, and they were consulted during several drafting stages. But the formulation of cross-provincial or, in the case of the Pearl River Delta, cross-border development strategies was ultimately treated as a central-government affair that transcended regional competencies. Although local authorities had their own interests in mind, NDRC planners emphasized that the Pearl River Delta program was designed to work out a productive division of labor between the competing jurisdictions in the area and promote future administrative and regulatory convergence (interviews with NDRC, Guangdong DRC, and Shenzhen government officials and advisors, 2009 and 2011).

Under the leadership of the State Council, the NDRC’s Division for Regional Economies, in collaboration with provincial-level governments, has attempted to systematically combine macro-regional development programs with decentralized experimentation through establishing a “multilevel pattern of experimental points” (Peng, 2010). Through these NDRC-coordinated efforts, national planning and regional experimental zones have become closely linked initiatives. Yet “the simultaneous push for multiple schemes of regional development may actually dilute much of the focused effort and policy attention as the center has only limited resources” (Chung, Lai, and Joo, 2009: 125). The macro-regional programs can be seen as a mechanism of governance through implicit contracts between central and regional governments: giving policy authorization to regional governments in exchange for their compliance with national development priorities and a claim to strategic coordination by the central government.

While experimental schemes are seen by Beijing planners as an instrument of correcting and optimizing the planning process, regional policy makers tend to see them as a way to expand their leeway in policy adjustments and simultaneously raise their profile with the central government. Establishing experimental zones thus constitutes a contractual mechanism *within* the planning framework that serves different purposes for national NDRC technocrats and local policy makers. Beijing grants this leeway intentionally, with clear core objectives and parameters, and encourages experimentation as well as competition among localities to resolve difficult policy problems. Combining planning with experimentation was officially proposed in the 1993 Central Committee decision on establishing a “socialist market economy.” The decision’s third article stated that government plans should allow room for “bold experiment” and some plans “should be tried out first in selected localities or areas and then extended after experience has been gained” (CCP Central Committee, 1993).

China’s regional plans thus serve multiple functions. Most basically, they create a framework for medium- and long-term regional development strategies, which allows local and national policy makers to coordinate infrastructure investment and industrial policy. The regional plans also carve out a policy space for local officials to address problems creatively, either in order to adapt to local conditions and resource constraints, or to experiment with solutions to broader challenges that can be applied nationally if successful. They therefore provide both an assurance of stable policy objectives as well as flexibility to adapt and innovate.

## Special Plans

Special plans are designed to coordinate investment, regulations, and administrative actions among multiple agencies and levels of government (Zhu, 2010). Importantly, these plans are thematic, not agency specific—so an individual bureaucracy might play a role in multiple plans. These plans, which can span more than one planning period, also play a role in establishing high-level support for individual projects, which can be important for obtaining resources and expediting regulatory approval. The tiered implementation system also encourages experimentation in policy making, with considerable autonomy delegated both to local governments and central ministries to design implementation programs.

According to the 2005 State Council document that clarified roles and responsibilities in national planning, the special plans set operative responsibilities and oversee major projects, as well as legal and administrative rules and regulations required by the State Council (State Council, 2005).

National-level special plans are, in principle, limited to those issues that affect the overall development of the national economy and society, large programs that need State Council authorization and approval, and projects that require large-scale investment. This primarily includes basic infrastructure such as agriculture, water, energy, transportation, and communications; the development and use of land, water, ocean, coal, oil, gas, and other important resources; and the provision of public goods and public services such as ecological development, environmental protection, disaster prevention and mitigation, science and technology development, education, culture, sanitation, social security, and national defense, as well as industries that need government assistance or adjustment.

In practice, however, there is significant diversity in the scope and character of the national- and local-level plans. There were roughly 160 national-level special plans during the Eleventh Five-Year Plan—many of which were issued late into the plan period—as well as dozens issued by every provincial and county-level government.<sup>13</sup> Nationally, this included five-year plans for individual industries, such as pharmaceuticals, food processing, chemicals, cement, and textiles, as well as slightly broader medium- and long-term industry development plans, including shipping, oil refining, and cement. Even more general thematic plans guide government policy to support the economy, as in science and technology, energy efficiency, and renewable energy sources, or to coordinate long-term policies, such as plans for rail and highway networks, and regional power infrastructure, or to improve the quality of government services, such as for disaster mitigation, education, and preservation of cultural relics. These plans are sometimes replicated by provincial and city governments in a second wave of special plans authorized by the corresponding level of government. They then culminate in several waves of implementation guidelines, divisions of responsibility, and tailored targets and spending plans for one or more bureaucracies.

Western analysis of the Chinese policy-making processes often observe the initial high-level statement of intent and the eventual implementation of only loosely coordinated or deviating policies on the ground. The dynamics of planning processes in bridging this gap are regularly overlooked. And the diversity of special and comprehensive plans makes broad statements indeed difficult.

Yet the energy efficiency initiative in the Eleventh Five-Year Plan, as detailed in the following section, provides an instructive case study of how planning processes and documents interrelate and fit together. It highlights how policy incentives, political decentralization, and the plan updating process work in practice. Energy efficiency is particularly relevant, because it will be sustained in the future (as it is in the Twelfth Five-Year Plan) and

typifies efforts at improved governance and public service provision that go beyond a mere focus on economic growth. It is also an interesting case because it is one where policy objectives ran counter to (and successfully overcame) local leaders' other incentives (i.e., economic growth and revenue), and was thus a more challenging policy to implement in China's political economy. One prominent subcomponent of the energy efficiency drive, the Thousand Enterprise Initiative, is given particular attention to illustrate how national objectives are translated into concrete action via the special plan system. Though the energy efficiency drive was problematic in certain aspects, it was assessed as broadly successful against the benchmarks of the very ambitious original targets, by both government and external evaluators (see State Council, 2011; Yao and Kroeber, 2010).<sup>14</sup>

### **Case Study: The Energy Efficiency Drive under the Eleventh Five-Year Plan**

Following an alarming jump in China's energy consumption between 2002 and 2005, China's leadership formulated an ambitious energy efficiency drive (Zhao, 2007; Levine et al., 2010: 8).<sup>15</sup> A 20 percent reduction in energy intensity (energy consumption per unit GDP) was one of the eight newly introduced "binding" targets of the Eleventh Five-Year Plan, and one of three that received particular emphasis during plan implementation (State Council, 2006a, 2006d).<sup>16</sup> This commitment was sustained through the Twelfth Five-Year Plan, which aims for a reduction of 16 percent (State Council, 2011).

The first iteration of the energy efficiency drive actually came in 2004, with the Medium- and Long-Term Energy Conservation Plan (NDRC, 2004). This plan became a cornerstone for the energy efficiency component of the Eleventh Five-Year Plan outline, which was released fifteen months later (Levine et al., 2010: 15–16). The outline set out specific, mandatory energy-efficiency targets and specified ten major projects to achieve these targets, such as energy-saving building standards and improved efficiency in coal plants (State Council, 2006a, 2006d). But the implementation programs to manage these projects, design new standards, and coordinate policy took shape gradually over several years, and in some cases (notably the Thousand Enterprise program described below), central programs were replicated at the provincial level. A crucial point is that while the five-year plan outline focused on the energy efficiency target, in itself it marked neither the start of the energy efficiency drive (which began at least a year earlier with the long-term plan), nor a full plan to achieve the target (since many specific policies

emerged only two or three years later). The plan outline's proposals and targets in early 2006, therefore, were little more than a marker—albeit a very important one—in a gradually unfolding policy process.

One of the many policy programs developed to help execute the goals included in the five-year plan was the Thousand Enterprise Initiative, which had its roots as a 2003 experiment in Shandong to upgrade energy efficiency through individual, firm-level contracts, subsidies, and evaluations (Levine et al., 2010: 59). Following the successful experiment, the idea of mandating company-level targets for energy conservation was incorporated first in the Medium- and Long-Term Energy Conservation Plan, and later in the national Eleventh Five-Year Plan outline (NDRC, 2004; Levine et al., 2010: 59). A detailed implementation plan for mandated energy reductions at the nation's thousand biggest energy consumers was released a month later, introducing the initiative as one of many policy tactics to help local and national officials achieve their plan goals. The Thousand Enterprise Initiative was explicitly linked to the five-year plan, but in many other cases, similar sets of policies might only be loosely tied to the plan or ignore it altogether, even when they emanate directly from the plan's requirements and instructions.

In a process repeated hundreds of times throughout the country for different issues, this implementation document was coordinated by a lead agency (in this case NDRC's Department of Resource Conservation and Environmental Protection) and then jointly published by the cooperating agencies—the Office of the National Leading Small Group for Energy, the National Bureau of Statistics (NBS), the State-Owned Assets Supervision and Administration Commission (SASAC), and the General Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ).<sup>17</sup> This is a crucial first step in interagency coordination, because such instructions generally flow down through a defined chain of command, and a joint document is necessary to provide coordinated instructions to all subordinate offices.

This implementation plan divided responsibilities among agencies and listed the thousand enterprises and their energy conservation targets. Each agency had a clear role: NBS was instructed to begin building a comprehensive statistical reporting system, the provinces and directly administered cities were to establish monitoring and oversight procedures, SASAC was told to introduce an oversight and evaluation system for the central government's state-owned enterprises (SOEs) in the program, and so on (NDRC, 2006a; State Council, 2006c). In August 2006 the State Council issued a decision 决定 on energy conservation that further clarified some responsibilities (State Council, 2006c). In September it released another document specifying individual province-level energy efficiency targets, which had been the

subject of lengthy negotiations with provincial governments (State Council, 2006b). To address previous failures with under-enforcement or poor implementation of conservation goals, energy intensity targets and monitoring systems were developed and incorporated into local officials' performance evaluations (State Council, 2007a; e.g., Guangdong Province People's Government Office, 2008).

Meanwhile, provincial governments were busy creating their own plans for meeting their assigned targets. Guangdong, for instance, released both a general policy for meeting its mandated 16 percent energy intensity reduction target and an implementation plan for its share of the Thousand Enterprise Initiative, in November 2006.<sup>18</sup> The latter comprised two elements. Guangdong had partial responsibility for supervising 27 enterprises in the national Thousand Enterprise program. But it also created a province-level Thousand Enterprise Initiative under which the most energy intensive enterprises within the province—originally only 625, actually—were assigned energy-saving quotas, in a process that replicated the national program's delegation of targets, cadre evaluations, and administrative responsibilities. One hundred and fifty-nine enterprises were ultimately assigned to large prefectural-level cities, and supervision of energy targets for the remaining enterprises, which grew to 914 by 2008, were delegated to city and county governments.<sup>19</sup> In December 2006, Guangdong published the division of labor, including revised energy-conservation quotas for each city and district, and performance criteria for local officials (see Southern Media Group, 2006; Guangdong Province People's Government, 2006c; Guangdong Province People's Government Office, 2008).

Thus, by early 2007, a year after the national energy efficiency target was announced, thousands of enterprises around the country had received energy conservation targets; the responsibility for assuring accountability for meeting these targets had been divided among a range of government agencies at the central, provincial, and city levels; and officials at all levels were put on notice that they would be rated on their success in meeting these targets. But many of the specifics had yet to come. Energy standards for new investment projects, for example, were published gradually during 2007 (NDRC, 2006b, 2007). Procedures for reporting and monitoring energy consumption were only established in 2007 and 2008 (State Council, 2007a). And financial incentives and punishments to ensure enterprise compliance with energy targets continued to evolve with varying degrees of formality.

So it was only toward the end of 2008, just as the five-year plan was passing the half-way mark and the mid-term evaluation process was being initiated, that national, provincial, and city governments had the basic tools necessary to administer a major component of the energy efficiency

plan—and many were still in the pipeline or had to be tweaked in 2009 and 2010. Even so, the efficiency drive in general, and the Thousand Enterprise Initiative in particular, scored notable successes, which have been validated by outside experts. A detailed study of China's energy efficiency drive by the Lawrence Berkeley National Laboratory found that overall, China achieved about a third of the energy savings targeted in the Eleventh Five-Year Plan by the end of 2008 (Levine et al., 2010: ES-2). The savings accelerated sharply in 2007 and 2008 as programs took root, reflecting the long process of policy development, and appear to have continued through 2009–2010 well enough to nearly meet the 20 percent target (see Levine et al., 2010; Yao and Kroeber, 2010). Among the various initiatives, the Thousand Enterprise Initiative was a particular success, achieving 95 percent of its five-year energy-saving target in the first three years of the plan (Levine et al., 2010: ES-2).

As noted above, the energy conservation initiative in the Eleventh Five-Year Plan appears to have been a success, despite initial problems and some energy-savings initiatives that severely underperformed. Its success can be attributed largely to two key features. First, it was an extremely high priority for the leadership and within the plan's hierarchy of targets. Wen Jiabao took a direct interest in the plan's success and, in addition to ensuring that the initiative remained a top policy priority even during the economic crisis in 2008–2009, he repeatedly emphasized the importance of the plan as a national policy goal and a factor in cadre evaluations. This political backing ensured that under-performance in this area would hurt career prospects of ambitious officials, and provided a counterweight to the contradictory incentive to promote economic growth at the expense of other priorities.

Second, the energy efficiency plan was comprehensive, well coordinated, and adaptive. When programs succeeded, they were expanded and replicated; when they failed, attempts were made to improve or redesign them. The plan itself even contained efforts to build the government's capacity to collect information to better analyze and evaluate policy, and improve the political incentives for compliance. Chinese planning is good at the latter—adaptation and refinement of tactics are built into the system—but top-level policy makers can only intervene in a limited number of issues. A lower-priority plan might have been allowed to wither.

One final feature of China's planning system, which was illustrated by the energy initiative, is that learning by doing is messy even when it is effective. The initial stages of implementation were experimental and launched before coordination and evaluation mechanisms were in place. Many energy-saving programs, such as closures of outdated factories, were strongly resisted by local officials and produced limited results. Negotiations

over plan responsibilities and burden sharing were followed by renewed—and highly public—pressure from Beijing to meet performance targets. This led to many skeptical assessments of the plan's likely impact, even though it appears to have succeeded in meeting its objective and ultimately evolved into a relatively effective policy program in the latter half of the plan period.

## **Plan Formulation**

Unlike most other aspects of China's planning process, the steps involved in plan formulation are treated quite extensively in the research literature in China as well as in the West (see, e.g., Wang and Yan, 2007; Naughton, 2006).<sup>20</sup> Top party leaders and the State Council, and their affiliated research arms, sit at the apex of the planning process, but the NDRC's various offices are the locus of many drafting and planning functions: they approve and oversee regional strategic plans down to the city level, manage major regional investment projects, and are deeply involved in virtually every macroeconomic issue. The same is true at the local level, where province- and city-level Development and Reform Commissions enjoy an analogous leadership role in the drafting, implementation, and evaluation stages of local plans. Provincial commissions supervise city-level planning in the same way the NDRC oversees the provincial commissions, although bigger issues, including long-term plans, are subsequently sent to the NDRC in Beijing for review and, in some cases, approval by the State Council.

As the planning and implementation process unfolds, targets and responsibilities are assigned to lower-level governments and individual ministries, which then draft and execute detailed implementation plans. Leading small groups—interagency panels to coordinate the work of multiple government bodies on particular issues—also play an important role. At the central level, leading small groups are generally chaired by a state councilor, but the secretariat for the leading small group is usually an office within the NDRC, which effectively gives the NDRC agenda-setting authority.

The same organizational structure is repeated at the provincial and city levels: vice-governors and vice-mayors will chair leading groups or project committees, but their staffing frequently comes from the local Development and Reform Commission. Additionally, many key national and local special plans are ultimately led by the commissions even after the plans are finalized. After Guangdong began its Eleventh Five-Year Plan in 2006, for example, the provincial government named the Provincial Development and Reform Commission the lead agency for implementing fifteen of fifty-one special plans and assigned it a supporting role in many of the others. These

relationships endow the local and national Development and Reform Commissions with varying degrees of authority over their partner ministries, particularly in designing policy and monitoring and evaluating progress. Responsibility for policy execution, however, is shared or controlled by the dozens of ministries or bureaus that receive a bundle of assignments in support of the multitude of plans above them.

## The Planning Cycle

The planning process is a continuous cycle of information gathering, analysis, policy formulation, policy implementation, evaluation, and revision, and is better thought of as a *five-year policy cycle*, rather than unitary plan. Preparatory work begins as early as two years before the formal five-year plan period starts and culminates when the Central Committee approves the new guidelines at a plenary meeting held in the final months of the current plan. Local governments and ministry offices collect and organize information to feed up successive levels of political authority while senior officials coordinate the drafting process.<sup>21</sup>

In the months following the approval of the national outline, ministries, provinces and cities release dozens of thematic special plans that provide the first level of practical detail on how the main objectives of the new five-year plan outline are to be realized. But even these are rarely sufficiently detailed to begin executing policy. Government General Offices, Development and Reform Commissions, and ministries at all levels start issuing a flurry of documents—decisions 决定, opinions 意见, programs 方案, explanations 说明, and methods 方法—to guide policy execution and coordinate the different types and levels of plans. These documents name the lead agencies for further coordination, execution, supervision, and evaluation of individual plans and projects. They also provide individualized targets tailored to regional conditions and resources, and set initial guidance for how progress will be measured and evaluated. After the division of responsibilities and targets are set, government offices develop a series of “work programs” 工作方案 and “implementation programs” 实施方案 with increasing levels of detail and specificity on how plan goals will be achieved and how they will be evaluated. These documents can take one or two years to emerge, and may build upon existing experiments or independent initiatives.

In the middle of the third year of the plan period, all levels of government initiate a formal mid-course review and adjustment process. The review can stretch through the remainder of the plan period: the Eleventh Five-Year Plan review began in mid-2008 (Table 3), but policy revisions and adjustments

**Table 3.** Plan Formulation in China: The Example of the Eleventh Five-Year Plan.

	Decision making	Administrative planning
2002	From October: New party and government leadership is set up; work priorities continue to be defined by the 10th five-year plan (2001–2005)	
2003	July: State Council orders NDRC to start drafting next five-year plan for the 2006–2010 period	September: NDRC asks for public and research input to define agenda of next plan
2004	Politburo/CFELSG identifies core challenges and tasks for next plan period	Year-end: CFELSG Office and NDRC request research reports on 22 core tasks for next plan period
2005	February: drafting group for “11th five-year plan guidelines” is formed, headed by premier with a total of over 50 members: departmental and regional policy makers, economic experts; Feb–June: drafting group meets eight times	February–June: CFELSG Office/NDRC task force formulates “11th five-year plan guidelines” based on meetings of drafting group
	June/July: The Party Core Group of the State Council discusses and approves the draft guidelines	
	July: General Bureau of Party Center sends “11th five-year plan guidelines” to more than one hundred party and non-party units for consultation.	
	July: General Secretary of CCP holds consultation meeting with non-party groups and individuals.	
	August: Top party leaders go on investigation tours in regions to solicit opinions on plan proposal	July–October: CFELSG Office/NDRC task force integrate new suggestions and new input into plan guidelines

*(continued)*

**Table 3. (continued)**

	Decision making	Administrative planning
	<p>October: Central Committee Plenum approves five-year plan guidelines 建议; document is made public</p> <p>February: State Council holds four days of meetings on final revisions of new five-year plan; hears opinion of representatives from state/private/rural sector</p> <p>March: NPC plenum approves new five-year plan “Outline” 纲要 for 2006–2010</p> <p>From November: reshuffle of Party Center and State Council; top leaders remain in place</p>	<p>End of October: State Council gives order to transform CCP plan guidelines into more detailed government document; NDRC establishes 37-member outside expert group</p> <p>October–December: NDRC asks public for input on new plan; central government departments give additional input</p>
2006		
2007		<p>July: NDRC holds national conference to sum up work on the 11th five-year plan, arrange implementation, prepare special program plans and macro-regional plans</p>
2008		<p>Year-end: NDRC announces results of mid-term evaluation of five-year plan</p>
	<p>NDRC receives order to prepare next five-year plan but decelerates document drafting with a view to global economic uncertainties</p>	

Note. NDRC = National Development and Reform Commission; CFELSG = Central Finance and Economics Leading Small Group.

continued through 2010. The review process therefore blends together with the preliminary work for the subsequent plan, and the cycle begins anew.

In addition to collecting information and providing a mechanism for policy revision and improved coordination, the review plays an important political role. Ministries and local governments, which have a high degree of autonomy to oversee their own programs and experiment with policy ideas, are evaluated by both outside experts and superior levels of government, who can reassert policy authority directly through policy revisions or indirectly, through performance evaluations that play a large role in shaping leaders' priorities. The system thereby produces dynamic institutional authority relationships, with levels of independence enjoyed by lower-level policy makers varying over time. It also produces distinct phases in policy making and implementation, with early plan initiatives experimenting with new tactics or launching without the coordinated support and institutional resources that will come later. Then, in the latter half of the plan, as mid-term reviews are completed, leaders in Beijing and local capitals will reassert their authority as needed, which produces another cycle of center-local negotiations and, at times, exertion of political authority.

### **Embedded Autonomy in the Planning Process**

The national-level planners' network that crafts the initial plan guidelines (a Communist Party document) and ensuing plan outline (a State Council document) is composed of top policy makers, including the premier and vice premier(s) responsible for economic affairs. They are supported by policy advisors active in and around the staff office of the Central Finance and Economics Leading Small Group (CFELSG), diverse departments of the NDRC, a small number of affiliated research bodies, and a select group of high-caliber economists and economic advisors. This group retains a technocratic insulation from sectoral, regional, and bureaucratic vested interests, yet is close enough to the policy process to be able to absorb information through regularized policy consultation and debate. As such, the core plan drafting process fits the standards of "embedded autonomy" (see Evans, 1995; Heilmann, 2012).

Starting from the drafting of the Seventh Five-Year Plan in the mid-1980s, and deepened from the 1990s on, China's planning process has become much more inclusive and consultative (beyond mere stakeholders, also engaging domestic and foreign experts). The drafting of the Eleventh Five-Year Plan was characterized by several planning officials as a thoroughly innovative approach since ministerial and provincial proposals that traditionally determined core components and objectives of the national plan were now

juxtaposed with pluralistic research input commissioned through public tenders from major Chinese think tanks and international advisors from the World Bank and the Asian Development Bank. Moreover, for preparing the Eleventh Five-Year Plan, the NDRC convened a commission of 37 experts, mostly academics representing a broad spectrum of approaches to development coordination, from more state-guidance-oriented (e.g., Hu Angang) to more market-oriented (e.g., Wu Jinglian). This commission was consulted in several drafting stages and, according to officials from the NDRC's Division of Planning, managed to reach a consensus on the core objectives and reorientations contained in the plan document (see Lai, 2010; and Yu, 2001).<sup>22</sup>

Interviews at central and provincial-level planning bodies revealed that frequent communication and a unifying "agency point of view" provide a certain degree of coherence to the planning system across administrative levels. Development and Reform Commissions at both the central and local level define themselves as "policy pivots" whose mission it is to hold together the universe of China's government bureaucracies. In addition to the high-profile year-end planning conferences, there are frequent central, provincial, or joint work meetings which officials from both administrative levels attend. Moreover, communication through phone calls and personal visits between provincial-level and central planning bodies to deal with ad hoc policy or investment adjustments belong to the daily administrative routines. Overall, typically in China's administration, central, provincial, and municipal planning officials often know their counterparts on other administrative levels personally and try to cultivate good relations.

One high-powered, though not much publicized, mechanism of regional government input into central plan drafting are the so-called four slices meetings 四个片会 held for the Northeast, Northwest, Southeast, and Southwest macro-regions (东北片, 西北片 etc.) respectively, in the early stages of plan drafting. During these meetings, governors and other provincial-level economic decision makers come together with central policy makers and planners to identify and debate the most pressing development issues to be addressed through the next five-year plan.<sup>23</sup> Information on informal exchanges and ad hoc meetings between central and provincial policy makers is incomplete and non-transparent since many consultation and bargaining meetings are not reported in the media. But the diary of ex-premier Li Peng contains many entries from the mid-1990s that document frequent economy-related meetings of provincial party and government leaders with the premier that were not publicized at the time.<sup>24</sup>

During the preparation of regional development plans and strategies, central planning officials also go on extended fact-finding tours 调研 in the respective provinces and give advice and guidelines to provincial planners.

Moreover, in recent years, provincial-level governments have increasingly come to hire policy researchers from central government institutes (such as the NDRC's Academy for Macroeconomic Research) to advise them in crafting regional development strategies and individual policies. This strong new trend in policy consultancy serves to strengthen the coherence, or at least avoid contradictions, in concurrent central and local policy programs.

This process helps separate the policy makers responsible for plan implementation from the evaluation and monitoring process (see Xu, 2010). Similarly, the structure of the plans—with the guidelines and outline written by technocrats in Beijing and policy details set by implementing agencies in subsequent sub-plans—helps insulate core objectives and policy goals from industrial and bureaucratic interest groups. The planning process thereby helps preserve a degree of embedded autonomy in its overarching goals and strategy.

### **Negotiations, Harmonization, and Plan Lock-in**

Overall, China's macro-level five-year planning moved from the early reform era mode of *centralized, closed, intrastate bargaining and coordination* to *controlled multiple advocacy* based on carefully orchestrated consultation of state, non-state, and even foreign input and on much more regularized administrative procedures that are supposed to support "scientific" policy making. Since post-1996 five-year plans do not include long lists of priority investment projects anymore, the drafting of comprehensive five-year programs is much less exposed to intrastate lobbying by sectoral vested interests.

This has not eliminated the problem of intrastate bargaining and coordination, however, and the plan outline does not immediately translate into action without extensive coordination, bargaining, and negotiations over individual responsibilities and targets. Key policy details and special plans are usually written by local governments or ministries directly engaged in implementation. And even though the outline and regional and comprehensive plans provide an important framework, there can be significant latitude during execution and bureaucratic, regional, and private interest groups have a voice in the way the plan details are crafted.

Central drafters must coordinate actively with the agents of policy implementation as targets, resources, and responsibilities are allocated. A challenge of plan drafting is the harmonization 衔接 of plan agendas and plan targets across administrative levels. In traditional Mao-era plan coordination, central planners adjusted and aggregated the indicators and quotas submitted from ministerial and regional planning bodies in the national plan, and then subdivided the aggregate national plan targets into regional quotas to be adopted

and implemented by provincial-level governments 国家分解指标到各个省. In the post-1993 development planning system, target harmonization has rested less on top-down orders and more on intensive communication between the central and provincial levels of the planning system.

The harmonization of the top priority binding targets spelled out in the Eleventh Five-Year Plan is a striking illustration of how complex administrative harmonization has become. In 2006, four overworked officials in the NDRC's 27-person-strong planning department 规划司 were charged with checking on the provincial-level plans. And the provincial plan documents were submitted to the NDRC only *after* the respective provincial People's Congress had already approved them. The NDRC's officials then concentrated on checking the inclusion of national *binding* targets in the regional plan documents, especially the targets of 20 percent energy conservation and 20 percent emission reduction for the 2006–2010 period. Yet the five-year program that Shanghai submitted to the NDRC set the energy conservation target at 15 percent only, justifying this lower target by pointing to Shanghai's already technologically advanced economy that would make a 20 percent reduction target impracticable. The NDRC planners raised objections and asked the Shanghai government to revise the target upward. The Shanghai government responded by establishing an experts' committee to reassess the potential for energy improvements. As a result, the Shanghai plan target was raised to 20 percent. Fiscal allocations for promoting energy-saving and environmental technology had to be revised upward. The NDRC's unwelcome interference in Shanghai's plan targets therefore affected the municipal budget directly.<sup>25</sup>

A similar conflict over national-regional target harmonization occurred with the Guangdong provincial government. Guangdong province initially set its energy intensity reduction target at 13 percent in the provincial plan outline approved in early March 2006, even though the national plan, which was released a week later, set a national goal of 20 percent (Guangdong Province People's Government, 2006a). Provincial planners argued that environmental technologies in Guangdong's economy had already been upgraded to a level where further emission reductions could be achieved only at a slower pace and at much higher cost. An expert commission installed to reassess Guangdong's potential of fast emission reduction confirmed the objections raised by the provincial government, but the NDRC and State council forced Guangdong to accept a slightly higher target of 16 percent.<sup>26</sup>

Officials at the NDRC saw these interactions and compromises as a big step in regularizing central-local plan making, and accepted the need for more variation in plan targets across regions and sectors, thereby moving away from an "unscientific" imposition of uniform targets 一刀切 on

different administrative levels. However, once completed, the targets are incorporated into performance criteria and contracts (discussed below), and are effectively locked-in for the plan period (though some renegotiations are possible if conditions change or problems are identified).

It is one of the most remarkable features of the current Chinese planning system that *the regular five-year planning periods are not synchronized with the turnovers in party and state leadership*. Incoming leaders remain bound to the previous plan for three full years and thus cannot openly discard the policy goals set down by their predecessors. Plan mandates are thus overlapping, and we find a “plan lock-in” and a continuity of comprehensive policy programs across leadership changes and different administrations. The *non-synchronicity* between government turnover (e.g., 1998, 2003, 2008, 2013) and the launch of a new five-year plan (1996, 2001, 2006, 2011) helps to safeguard basic policy continuity across leadership and institutional changes in the executive and the legislature. A new five-year plan must regularly be drafted beginning in the middle of a government’s term in office and cannot immediately be revised by a new government.

Thus the CCP’s guidelines for a new five-year plan are prepared after a new CCP leadership has established itself (e.g., 2003–2005, with the official plan document adopted in 2006) or after the CCP leadership has reviewed the economic situation in its year-end central economic work conferences. The “CCP rhythm,” not the rhythm of State Council turnovers, thus governs plan making. This fact is crucial for understanding how the plan is administered and how it shapes the priorities and interests of individual policy makers. The link between plan goals and cadre evaluations means that the career prospects of policy makers throughout the government depend on how well they meet objectives often set by their predecessors.

## The Plan-Cadre Nexus

In China, political authority, policy preferences, and many individual interests are controlled through the party’s extensive nomenklatura system. Plan implementation too has traditionally been driven by personalized, cadre-based mechanisms of ideological and career control (interview with economic historian Wu Li, 2009; see also Wu Li, 2006). Economic administration is held together by a Communist Party cadre hierarchy that facilitates a coarse and inconsistent, yet in the eyes of central leaders mostly “satisficing” kind of control (not optimal, but just enough to hold formal hierarchies and informal networks together). In effect, only those parts of the plan that are reconfirmed and emphasized through party documents have the binding authority of commands that can define the priorities and interests of subordinate levels of government.

In China, the linkage between plan targets and cadre assessments was loose and unsystematic until the early 1990s. From the early 1990s on, as a result of a thorough overhaul of the party's personnel system, cadre evaluations became more systematic and started to include more economic and social indicators than just GDP growth or unemployment in each leading cadre's jurisdiction (COD, 2009; Li, 2009). A breakthrough for systematically linking a more complex set of economic and noneconomic plan targets with cadre appraisals resulted from the re-institution of a "binding target" category in national, provincial- and local-level planning from 2006. As a lesson derived from ill-defined (and therefore ill-enforced) environmental targets contained in the Tenth Five-Year Plan, NDRC drafters took care to establish clearly defined and easy to understand indicators so as to make the quality of implementation scrutinizable for both planning bodies and CCP organization departments. In effect, the top-priority binding targets defined in the Eleventh Five-Year Plan and scrutinized during mid-course evaluations of plan implementation were included in cadre performance appraisals throughout China. In the eyes of NDRC officials, these measures gave a big boost to the enforcement of key plan targets during the 2006–2010 period (interviews with NDRC planning officials, 2009, 2010, 2011).

Although binding targets are transmitted by national planners to provincial-level governments, the crucial implementation link is between the provincial and municipal/county levels. From 2006, the Chongqing municipal government passed down six binding targets (which are partly identical with those in the national five-year plan, partly locally specific; the national plan mentioned eight binding targets) to county-level governments—not only at the beginning of the five-year planning period, but for every annual planning exercise. Environmental, land use, birth control, and health care targets were among the binding targets most emphasized by the municipal government and were directly included in the local plan-cum-cadre evaluation system to check on administrative performance every year. Cadre evaluations thus were designed to make use not only of the binding plan targets (as benchmarks for cadre performance), but also of the evaluations undertaken by planning and statistical bodies.<sup>27</sup>

The Eleventh Five-Year Plan ultimately contained 22 targets, of which 8 were binding; the Twelfth Five-Year Plan contains 27 targets, of which 16 are binding (see Table 1 above) (State Council, 2006a, 2011). The eight binding targets of the Eleventh Plan were included in local cadre performance evaluation metrics, and three—preservation of arable land, increases in energy efficiency, and pollution reduction—received renewed, high-level attention from Beijing throughout the plan period.<sup>28</sup> Beijing thereby made clear which targets it really cared about through performance contracts signed with local

officials and, in some cases, even enterprises, effectively creating a veto 一票否决 over career advancement and other benefits for leading cadre who did not meet their goals.<sup>29</sup> This process was replicated at lower levels of government, and integrated into the plan evaluation system. Through this system, Beijing is able to establish a small number of very high priority policy objectives far beyond formal administrative authority structures.

One side effect of the plan-cadre nexus is that these procedures have effectively raised the political status of national and regional Development and Reform Commissions and increased the political weight of their plan prescriptions and evaluations beyond economic administration to the cadre system, that is, the core pillar of the political hierarchy. In recent planning documents drafted by NDRC departments, a tendency toward strengthening central policy authority and control is evident. (Even terminology stemming from socialistic planning that had been discarded in the late 1990s [e.g., the “level-by-level subdivision of plan targets” 指标逐级分解] made a comeback in NDRC documents.) This effect is replicated within local-level governments, where Development and Reform Commissions play a similar role in coordination, plan approval, and evaluations on behalf of provincial, city, and county governments.

Plan targets and cadre evaluations have thus become complementary policy tools. This linkage points to persisting distinctive features of China’s political economy that are radically different from other government-guided political economies. The plan-cadre nexus is a mechanism stemming from both the command economy and Leninist party organization. The plan-cadre nexus establishes *person-based policy accountability* instead of law-based and bureaucracy-based accountability in implementation.

## The Recombined Governance of Planning

Looking closely at specific typologies of planning, it is possible to see a system of authority relationships, delegation of responsibility, and experimentation parameters that produce typical patterns and ways to deal with difficult policy problems.

By examining the practice of planning in specific policy sectors, we can provide a matrix of governance modes that are all based on formal planning, yet reveal strong variation in effectiveness and implementation characteristics. We find policy sectors in which public and social goods (such as railroad infrastructure, anti-poverty programs, land-use management) are supposed to be provided through *mandatory planning* that includes direct allocation of funding and administrative oversight (see Table 4, column I). In addition, Chinese planners have increasingly employed non-standardized forms of

**Table 4.** Recombined Governance in Chinese Development Planning.

	I Mandatory (administrative and SOE-based provision of public/social goods)	II Contractual (central-regional and government-enterprise cooperation)	III Indicative (government- induced market activities)
Allocative- Promotional	Railway construction	Technology policy	“Going global” program for outbound investment
Redistributive	Anti-poverty programs	Rural health services	Rural income generation
Regulatory	Land-use management	Energy industry restructuring	Private/SME sector restructuring

Note. Typology based on range of special plans 专项规划/计划在 the Eleventh Five-Year Plan planning period (2006–2010).

Source. Adapted from Heilmann, 2010.

*contract-based planning* to ensure and incentivize implementation of their policy goals by lower-level agents (see Table 4, column II). Targets and funding arrangements are written into formal contracts that are concluded between, for instance, a central ministry and a provincial government, or a provincial government department and major enterprises that take part in implementing state plans. Plan implementation through contractual targets is most visible in road construction, technology zones, energy production, hospital reform, and marketing reforms (e.g., for rural or cultural products) for which the central government needs the collaboration and bottom-up initiative of local governments and market participants. Such informal arrangements help supplement the formal plan incentives and help refine the parameters for central oversight and lower-level autonomy within a planning cycle or in cases where complex and competing incentives create challenging principal-agent problems.

We find, in addition to mandatory and contractual planning, a plethora of less binding forms of *indicative planning*, that is, based on government forecasting (e.g., statements that estimate growth potential in certain industries), signaling (e.g., announcements about substantial, step-by-step cuts of rural taxes or about preferential policies for small and medium-size enterprises [SMEs]), and indirect incentives (e.g., improved access to bank credits and domestic/overseas markets) to stimulate market activities and resource mobilization in sectors identified by the government as having development potential (see Table 4, column III).

## Experimentation and Adaptive Planning

One of its greatest strengths is that five-year plan implementation includes purposive action to give room to decentralized experimentation and discovery of new policy instruments. A careful scrutiny of the macro-regional plans, comprehensive plans, and special plans issued by China's central and regional governments provides ample evidence that decentralized experimental programs have actually become a standard technique for providing policy leeway to local administrations and improving adaptiveness in policy implementation (see above, Table 2).

Since experimentation under hierarchy is a purposeful and controlled—not just trial-and-error—process (Heilmann 2008), economic administrators see it as compatible with planning objectives in the Chinese context. The interplay between processes of *economic planning* and *economic experimentation* in China's governance thus constitutes a particular mechanism of policy correction during implementation that is both institutional, through the tiered hierarchy of plan authority, and cyclical, through the changing level of involvement of top officials. Local knowledge about practicable policy instruments thereby can be fed back into the planning process. In effect, experimental zones and projects serve to connect national and local policy processes and help to align local policy incentives with central goals (Heilmann, 2010).

Chinese plan makers set their goals and priorities while providing legitimacy and leeway for local tinkering during implementation. This distinctive Chinese approach to bottom-up program adjustment is very different from both Soviet-style command economies and Western legislation-driven policy making. The decentralized generation of policy options represents a crucial asset for innovation that had never been realized in top-heavy, centralized Soviet-type party-states (see Heilmann and Perry, 2011). At the same time, a constant tension between centralized “synoptic” and decentralized “experimentalist” policy making is built into China's policy process.

It can be argued that post-1993 new-style development planning was conducive to, or certainly did not impede, China's economic takeoff and stability because it made use of effective *corrective mechanisms*. Some of these corrective mechanisms that counter tendencies toward rigidity and centralization inherent in traditional planning governance appear familiar since they were observed already in other East Asian countries: the limitation of imperative planning to only a few tightly controlled sectors; the expansion and refinement of contractual and indicative (incentive-based, non-hierarchical) planning; the opening of diverse channels for absorbing foreign expertise and adapting it to local conditions; the exposure to world markets with resulting competitive and innovative pressures.<sup>30</sup>

Other core governance mechanisms that have shaped China's recent planning experience and facilitated continuous or ad hoc adjustments appear unusual and distinctive even in the East Asian context: the encouragement of extensive and sustained decentralized policy experimentation across a large spectrum of sectors; reliance on transitional, hybrid, and informal institutions ("institutional layering") over an extended period; under-institutionalized, oscillating patterns of centralized and decentralized coordination; imposition of top-level policy initiatives through the Communist Party hierarchy ("red letterheads," party meetings, campaign-style mobilization) in the case of emergency measures; reorganization of human resources management through the party-controlled cadre system.

In China, policy coordination is thus pursued through processes and instruments that are oftentimes starkly different from most present-day advanced or emerging political economies. The Chinese government has not invented these processes and instruments anew, but has rather recombined features of imperative, contractual, and indicative coordination that can be traced to China's own socialist planning legacy or to earlier Japanese or South Korean experiences during the takeoff phases of those economies. The planning process is central to encouraging and preserving this distinctive policy system that is effective at both experimenting with new policy prescriptions and adjusting existing programs.

## **Weaknesses of the Planning System**

For the Eleventh Five-Year Plan period (2006–2010), striking progress in the implementation of new environmental standards was reported in mid-term and pre-final NDRC and World Bank evaluations. Whereas during the Ninth and Tenth Five-Year Plan periods (1996–2005) there was little progress in increasing the emphasis on pollution control relative to economic growth, and many quantitative indicators of environmental protection were not reached, the evaluation reports on emission reduction and energy conservation for the Eleventh Five-Year Plan period pointed to notable successes. Senior NDRC officials in charge of evaluation work attributed these successes to the introduction of a limited number of binding targets whose fulfillment was easier to scrutinize. The links between the cadre management system and plan targets have succeeded in influencing policy priorities and incentives of implementing officials, but there are limits to this system.

Cadres may receive scores on as many as forty targets, ranging from GDP growth to environmental protection, from rural wages to arable land preservation. With so many targets, the effectiveness of the system can be diluted and policy makers devise strategies to maximize their performance rating in

ways that may diverge from the leadership's intentions (see Kostka and Hobbs, 2012). The party's personnel management system tries to resolve this by assigning each target a weight, providing the appearance of a scientific hierarchy of policy priorities. But in reality, most officials know that this part of their performance review depends on meeting a handful of "hard targets"; most of the others can safely be ignored. Since historically economic growth, population control, and social stability have been the real hard targets, officials will be inclined to favor those targets until they get an overwhelming signal that other things matter more (as was the case with Wen's insistence on energy efficiency). Additionally, despite the elaborate scoring methods and appearance of objectivity, in practice the evaluation system—like employee evaluation systems everywhere—can be highly subjective. There are some questions about whether corruption and factional or instrumental relationships play a larger role behind the scenes, with "objective" criteria mainly used to justify decisions made for other reasons.

Generally, it has been difficult for Chinese national planners to impose guidance and restrictions on local governments and companies if plan prescriptions run counter to market incentives and business interests. Goals and targets stated in Chinese development plans were implemented most effectively in policy fields in which government programs managed to align political cadre career incentives (and therefore administrative action) with domestic and transnational market opportunities (Heilmann, 2011). While provincial-level plan evaluators shared the basic view that local governments had taken the binding targets seriously and worked toward their fulfillment, they also made it clear that the contradictory incentive structure on local-level administrators had not been alleviated by the binding environmental targets. Aggregate economic and revenue growth still remained *de facto* the most important performance criteria for local cadres. If new environmental and energy technology helped to boost local growth and income, if the closure of highly visible polluting and economically run-down local companies could bring good publicity without hurting revenue and employment badly, or if central funds or special loans were available to invest in green technologies, local governments were generally willing to comply with the new plan targets. In such cases, cadre power could be aligned with both local economic and top-down cadre incentives.

However, when agents face multiple competing incentives, including targets in the plan, market forces, and practical constraints such as revenue growth, the delegated authority system can break down. The planning system is dynamic, and can adjust the relative value of various objectives—such as reducing the importance of growth in cadre evaluations and increasing the importance of environmental protection—but it can only do so if the absolute

number of priority objectives remains relatively small, or if the objectives themselves do not conflict with the other incentives agents face. As Chinese policy makers increasingly emphasize social welfare and public services, and increase the priority of objectives that limit economic growth, such as environmental protection and energy efficiency, the planning system's reliance on performance evaluations will come under strain.

The plan system is also not effective at eliminating resource constraints. China's efforts at development planning have so far displayed a pronounced weakness in pursuing redistributive goals and improving the development potential of disadvantaged population groups. Such goals are, for instance, at the heart of rural health care reform, social security reform, and more equitable education that have produced extremely uneven or disappointing results so far as judged by planners.<sup>31</sup>

Detailed implementation measures are supposed to guide provincial governments in fulfilling the goals of macro-regional development plans—this is the core of the reformed planning process—but this too has its limits (see NDRC, 2010). Though many central and provincial officials admit that NDRC centralization tendencies have become an issue of contention in central-regional communication, the actual effects of strong-hand rhetoric are generally seen as limited. NDRC officials frankly concede that they do not have the manpower and means to check on real-life implementation in the provinces (interviews at NDRC's Division of Planning, 2009 and 2011).

In China's bureaucratic hierarchies, policy evaluations are dependent on data provided through the political chain of command. If achievements in a policy area are hard to measure (or failures are easy to conceal), the basis of evaluation becomes murky. When environmental and energy targets threatened to affect business, revenue, and employment interests in a jurisdiction, local governments have tended to resort to manipulating environmental data.

These manipulations have been rarely exposed or punished, since both the Development and Reform Commissions and the CCP Organization Departments on the provincial level have a strong incentive to report positive evaluation results and to avoid presenting an unpleasant regional record to higher level party bodies (provincial-level DRC interviews, 2009, 2010, and 2011).<sup>32</sup> Official plan and cadre evaluations therefore must be judged with the usual strong caveats regarding data coming out of China's statistical system. These distortions also point to a severe limitation of using the party's personnel system, which flows through party secretaries at the apex of political units, rather than endowing the legal and regulatory (or statistical) institutions with the necessary political independence to enforce a rules-based system.

Finally, there are also obvious and hard limits to the planning ambition with regard to fundamental economic restructuring and the transition toward an efficiency-, innovation-, and domestic consumption-driven mode of development. Government planning and intervention have proven largely ineffective in promoting and guiding macro-structural shifts, that is, the “transformation of the growth and development mode” that has been defined as a core mission with changing formulas in all five-year plans from the mid-1990s on. The least successful element of the Eleventh Five-Year Plan’s energy intensity campaign was the effort to push the economy away from energy-intensive industries and toward services.<sup>33</sup> Such a structural shift can be encouraged with better incentives, but without a wholesale revision of priorities (e.g., drastically reducing the importance of growth relative to the development of the service sector), it is best accomplished through a re-pricing of capital and other factor inputs (notably energy), reforms in the financial sector, and simplifying regulations governing service industries, not the planning system (Hu and Yan, 2010: 28).

Despite these limitations, the cadre appraisal system has become the core mechanism for promoting plan priorities in addition to the direct economic incentives to be found in local economic development. The recalibration of cadre performance criteria and the reorganization of cadre evaluations have become a subject of intense efforts by the CCP’s organization departments (see COD, 2009; and Li, 2009). In the test case of ambitious energy conservation and environmental targets defined in the Eleventh Five-Year Plan, the plan-cadre nexus apparently conveyed a credible commitment by national policy makers. In combination with large-scale public investment in green technologies, the party center forcefully signaled that environmental protection and green-technology use would be a major new field for creating growth and income for local businesses and governments. Yet this required persistent intervention and emphasis from top policy makers (especially the premier), and such political capital cannot be dispersed widely.

## Conclusion

Chinese planning practices confirm one core lesson of policy studies: political economies should be disaggregated into policy subsystems, each of which is characterized by very different dynamics.<sup>34</sup> Thus, we will find effective plan implementation in certain policy areas, while finding persistent blockades or outright failures of plan-based coordination in other policy realms. Due to such stark variation, it is imperative to exercise restraint on generalizing across policy subsystems and refrain from jumping to sweeping hypotheses (e.g., “China even makes planning work” or “Chinese planning is a

complete failure and has to make way for markets”). By better understanding how the planning cycle influences incentives and resources of successive layers of bureaucracies and jurisdictions, and how it updates itself and adapts to new challenges, it is possible to explain a greater proportion of the Chinese policy-making process, including its successes and its pathologies.

Development planning in contemporary China is driven by an unceasing process of information gathering, consultation, analysis, document drafting, implementation, experimentation, evaluation, and revision that is better thought of as a *recurrent cycle of cross-level, multiyear policy coordination*, rather than an integrated, unitary plan system. Considering the mix of coordination mechanisms as well as the variation in the effectiveness and credibility of planning efforts across policy sectors, it is clear that China’s planning system is not capable of dealing with everything it claims to address at once. Yet at the same time, the evaluation and updating function it encompasses is useful even where it fails, since issues can move up in priority as policy makers identify shortcomings.

This study helps add to existing literature by going beyond static authority relationships and incentive structures to illustrate a dynamic process of evolving and sometimes competing priorities, with periods of experimentation and consolidation. The planning process allows for a high degree of adaptability and regional variation in policies and targets, and strikes an oscillating balance between overcentralized planning and complete regional autonomy. A major strength of post-1993 planning may be seen in its elasticity demonstrated through three readjustment periods (1993–1995, 1997–1999, 2008–2010) when severe macroeconomic challenges necessitated swift, temporary retreat from original plan objectives and emergency government interventions.

Overall, the incorporation of experimental programs into macro-plans, newly introduced mid-course plan evaluations, and regular top-level policy review have allowed Chinese planners to escape the rigidity traps that debased most planning exercises in socialist and non-socialist planning systems during the twentieth century. In the face of acute threats, Chinese planners “sacrifice the long-term goals for the short-term ones,” as one NDRC official put it, but strive to return to the original long-term goals as soon as the economic environment becomes more stable again. The Chinese approach to planning is geared toward often very ambitious goals. But it does give ample room to tinker with the means and the sequence of steps for achieving the goals.

The hallmark of Chinese development planning lies in the dynamics of *recombined governance based on loosely institutionalized, malleable, and adaptive policy processes*. These governance mechanisms go beyond standard explanatory models of the command economy, the East Asian developmental state, or the regulatory state. The variability and recombination of policy

processes should become a stronger focus of research so as to transcend static institutionalist categories and established normative assumptions that cannot capture the striking fluidity, and often unexpected effectiveness, of China's planning and policy cycle.

### Authors' Note

The views expressed here in no way represent those of the Department of State or the U.S. government. Much of the information on the planning process contained in this article has been produced or confirmed through several waves of interviews conducted with senior and mid-ranked officials in central- and provincial-level planning bodies between 2007 and 2012.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article:

Sebastian Heilmann's research was supported by a multi-year grant of the German Federal Ministry of Education and Research (BMBF). Oliver Melton received financial support from Gavekal Dragonomics (Beijing) in his initial research and writing on the Chinese planning system in 2010.

### Notes

1. For a critique of this bias in Western research, see Heilmann and Perry, 2011.
2. For individual, yet rather dated, exceptions, see Naughton, 1990, and Hsü, 1986.
3. This instruction given by Wen Jiabao in 2003–2004 was not published after the meeting but was confirmed by several high-ranking interviewees independently from each other. The instruction was immediately taken up as a boost for their powers by the planners within the National Development and Reform Commission and in other economic agencies.
4. Contemporary Chinese planners define as basic functions of planning: information; prioritization; resource mobilization and concentration; coordination and control; macroeconomic counter-cyclical balancing and crisis prevention. See Zhong, 2007: 52–59; Xiang, 2009: 40.
5. Detailed records on how top-level policy makers engaged in the post-1993 planning process can be found in the memoirs of Chen Jinhua, 2005, and Li Peng, 2007.
6. Though Zhu Rongji was appreciated as a forceful economic policy maker by NDRC interviewees, he was seen as constantly curtailing the administrative powers of the former State Planning Commission. Zhu, who was cast out of the

- Planning Commission (SPC) in the 1950s due to “rightist” deviations, apparently “never again set a foot into the building of the Planning Commission” when he served as vice-premier and premier between 1993 and 2003 (interviews with SPC/NDRC officials).
7. The formula was based on an internal NDRC research report that suggested giving top priority to these five challenges to put the party’s “scientific developmental view” into practice. This information comes from interviews with NDRC officials and AMR researchers.
  8. The old term 计划 continues to be used for the annual planning exercises that still form a core routine of the policy-making cycle and also for the five-year periods in certain “traditional” hierarchical planning domains such as the railway system.
  9. For detailed analysis of this governance mode, see Heilmann, 2010 and 2011.
  10. Pioneering works on particularistic contracting in China are Shirk, 1990, and Yang, 1997.
  11. On core definitions and principles of macro-regional planning, see AMR, 2007. There had been many attempts at interprovincial coordination of development and infrastructure policy during the early- and mid-1990s. But almost all these early efforts are seen as failures by the planners who participated in drafting these early cross-provincial plans. See Du, 2010.
  12. On Chongqing’s 2007–2009 elevation to a national experimental zone, see Wu, 2009.
  13. This estimate is based on the documents listed under the Eleventh Five-Year Plan’s Special Plans tab on the National Development and Reform Commission’s website and similar lists from provincial Development and Reform Commissions. [www.sdpc.gov.cn/fzgh/ghwb/115zxgh/default.htm](http://www.sdpc.gov.cn/fzgh/ghwb/115zxgh/default.htm) (last accessed January 21, 2013).
  14. Levine et al., 2010, found that in the 2006–2008 period, China had met roughly a third of its five-year goals in this area.
  15. The case study in this section draws on Melton, 2010: 10–14. Premier Wen noted the failure to fully implement energy efficiency policies or to assign responsibilities sufficiently, amid deteriorating energy consumption efficiency, leading Beijing to implement a strict evaluation and responsibility program.
  16. In a follow-up document issued by the Guangdong Province Development and Reform Commission (2008), the three binding targets that addressed arable land, pollution, and energy intensity were explicitly tied to cadre evaluations and thereby given special weight. These priorities were confirmed through interviews with provincial-level planners in Guangdong and Chongqing, 2009 and 2011.
  17. NDRC, 2006a. This document was issued jointly by the NDRC, the Office of the National Leading Small Group for Energy, the National Bureau of Statistics, State Administration of Quality Supervision, Inspection and Quarantine, and the State-Owned Assets Supervision and Administration Commission. See also Administration of Quality Supervision, Inspection, and Quarantine, 2006.

18. Guangdong Province People's Government, 2006b, and Guangdong Province Economic and Trade Commission, 2006, aimed to implement the State Council Decision on Strengthening Energy Conservation Work (State Council, 2006c), help meet the province's 16 percent unit-GDP power consumption reduction target, and follow through on the Thousand Enterprise Energy Conservation Initiative (NDRC, 2006c). Another document (Guangdong Province People's Government, 2007) includes implementation responsibilities for a broad range of provincial-level energy conservation programs to implement a comprehensive national work plan (i.e., State Council, 2007b).
19. Guangdong Province Economic and Trade Commission, 2008. Attachments 1–4 contain revised lists of centrally monitored companies within Guangdong, companies monitored directly by the provincial government, and companies monitored by their city governments.
20. See, for instance, Wang and Yan, 2007; Naughton, 2006. The main steps of the traditional plan-drafting process are well documented and explained in Wang and Fewsmith, 1995.
21. The national guidelines, issued by the CCP Central Committee, are followed by similar documents issued by local party committees in order of rank. The outlines are completed and released in reverse order by subnational governments: cities first, then provinces, and finally the national five-year plan outline, approved and publicized at the annual full session of the National People's Congress, usually in mid-March. The inverted sequence of plan outlines sometimes leads to confusion, as targets released in provincial or city outlines may subsequently be overruled by targets in the national outline.
22. The national Eleventh Five-Year Plan had three outside reviewers—the World Bank, the State Council Development Research Center, and Tsinghua University's Center for National Conditions—that conducted mid-term evaluations (see Xinhua, 2008). Guangdong's Academy of Social Science conducted a third-party evaluation of the five-year plan alongside the review led by the Guangdong Development and Reform Commission (see Guangdong Province Development and Reform Commission, 2008).
23. This information is based on interviews at national and provincial-level DRCs.
24. Information on informal, small-scale central-provincial economic policy meetings is scattered throughout the two volumes of Li Peng, 2007.
25. This is based on NDRC and AMR interviews.
26. This is based on separate interviews held with NDRC and Guangdong DRC officials.
27. Interviews at Chongqing DRC, 2009. See also the documents issued by the General Bureau of the Chongqing Municipal Government no. 184 (2006), no. 30 (2007), no. 44 (2008) and no. 111 (2009) in which the realization of binding plan targets contained in the municipal Eleventh Five-Year Plan are laid down as benchmarks for local government and cadre performance evaluations and repeated or modified in annual planning so as to ensure the implementation of overall five-year plan targets. Party and government organization, personnel, and

- supervision bodies are explicitly ordered to incorporate the binding targets into their cadre evaluations.
28. In a State Council document (State Council, 2006d), arable land preservation, energy intensity targets, and pollution controls were added to leading cadre performance evaluation systems. Local implementation in Guangdong went beyond these three targets for cadre evaluations since mid-term evaluation included revisions to increase Guangdong's pollution and energy intensity targets and a special appendix to address shortcomings in meeting the three priority restrictive targets (see Guangdong Province Development and Reform Commission, 2008).
  29. See State Council, 2006d. Another State Council notice (State Council, 2007a) approved three implementation plans for evaluating and monitoring energy consumption and three methods for evaluating and monitoring the emission of major pollutants issued by the NDRC, the National Bureau of Statistics, and the State Environmental Protection Administration. A document issued in Guangdong states that for city-level government leading groups and leading cadres, failure to meet the energy conservation targets specified in Guangdong Document 125 (Guangdong Province People's Government, 2006c) would constitute a veto criterion in performance evaluations, relevant cadres could not attend the annual awards ceremony, and approval for high energy-consuming investments would be blocked in their districts. Individual enterprises, particularly state-owned or state-controlled firms, would face similar restrictions and incentives (see Guangdong Province People's Government Office, 2008).
  30. These paragraphs draw on Heilmann, 2011: 33–40.
  31. This assessment is based on our interview series with planning officials at the NDRC, 2007–2011.
  32. On the basic mechanisms of beautifying or standardizing cadre evaluations, see McGregor, 2010: 70–103.
  33. Service sector as a share of GDP, service sector employment growth, R&D spending as a share of GDP are all “in progress, behind schedule” 进展滞后; energy efficiency was classified as “could be completed” 可能完成. These were the only four targets not yet achieved, of which energy intensity was the only restrictive target not yet met. According to Guangdong Province Development and Reform Commission, 2008, services growth, research and development as a share of GDP, energy intensity, urban waste water management, and pollution controls were the five targets Guangdong was “struggling to meet” in the mid-course review, of which energy intensity and pollution control were binding targets.
  34. The most systematic statement on this is given by Howlett, Ramesh, and Perl, 2009.

## References

- Administration of Quality Supervision, Inspection, and Quarantine (2006) 关于贯彻落实“千家企业节能行动实施方案”的通知 (Notice on the implementation of the “Implementation plan for the Thousand Enterprise energy conservation

- program”). 国质检量函 174 号 (AQSIQ document 174) [http://jls.aqsiq.gov.cn/gcjlxxzh/200610/t20061021\\_1501.htm](http://jls.aqsiq.gov.cn/gcjlxxzh/200610/t20061021_1501.htm).
- AMR [Academy of Macroeconomic Research of the NDRC] (2007) Task Force of the Research Institute for State Land and Regional Economy, “我国主体功能区” (China’s development priority zones). *宏观经济管理* 4: 3–10.
- BRAMALL, CHRIS (2009) *Chinese Economic Development*. London: Routledge.
- BRANDT, LOREN and THOMAS G. RAWSKI [eds.] (2008) *China’s Great Economic Transformation*. New York: Cambridge Univ. Press.
- CCP Central Committee (1993) “Decision of the CCP Central Committee on Some Issues Concerning the Establishment of a Socialist Market Economic Structure” (official translation). *Xinhua News Agency News Bulletin* 16388, Nov. 17.
- CCP Central Committee (2003) 党的十六届三中全会《关于完善社会主义市场经济体制若干问题的决定》(Decision of the 3rd plenum of the 16th CCP Central Committee on some issues concerning the improvement of the structure of the socialist market economy). Nov. [www.people.com.cn/GB/shizheng/1024/2145119.html](http://www.people.com.cn/GB/shizheng/1024/2145119.html).
- CHAI, JOSEPH C. H. [ed.] (1998) *China: Transition to a Market Economy*. Oxford: Oxford Univ. Press.
- CHANG XIN 常欣 (2006) “第九个五年计划的制定和实施” (Formulation and implementation of the ninth five-year plan). Pp. 603–60 in Liu Guoguang, 2006.
- CHEN JINHUA 陈锦华 (2005) *国事忆述* (Recollections on state affairs). Beijing: Zhonggong dangshi chubanshe.
- CHEN XIAN 陈先 [ed.] (1984) *计划工作手册* (Handbook of planning work). Beijing: Zhongguo caizheng jingji chubanshe.
- CHENG SIWEI 成思危 (2004) “论中国社会主义市场经济制度下的发展计划” (On development plans under China’s socialist market economy). *公共管理学报* 11, 2 (May): 5.
- CHOW, GREGORY C. (2007) *China’s Economic Transformation*. Malden, MA: Blackwell.
- CHUNG, JAE HO, HONGYI LAI, and JANG-HWAN JOO (2009) “Assessing the ‘revive the northeast’ programme: origins, policies and implementation.” *China Q.* 197: 108–25.
- COD [CCP Central Organization Department] [ed.] (2009) *建立促进科学发展的干部考核评价机制十二讲* (Twelve statements on creating a cadre appraisal mechanism to promote scientific development). Beijing: Zhongguo fangzheng.
- DU PING 杜平 (2010) “区域规划的演变与展望” (Evolution and prospects of macro-regional planning). Pp. 79–97 in Yang Weimin, 2010.
- EVANS, PETER (1995) *Embedded Autonomy: States and Industrial Transformation*. Princeton, NJ: Princeton Univ. Press.
- Guangdong Province Development and Reform Commission (2008) 关于广东省“十一五”规划纲要中期评估及部分目标调整草案的报告 (Report on mid-term evaluation of Guangdong province’s eleventh five-year plan outline and draft target adjustments). Report presented by Commission Chairman Li Miaojun 李妙娟 to the 7th plenary meeting of the Standing Committee of the 11th People’s

- Congress of Guangdong Province. [www.gddpc.gov.cn/fgzl/fzgh/zqpg/200812/t20081208\\_27052.htm](http://www.gddpc.gov.cn/fgzl/fzgh/zqpg/200812/t20081208_27052.htm).
- Guangdong Province Economic and Trade Commission (2006) 关于印发广东省重点耗能企业“双千节能行动”实施方案的通知 (粤经贸环资 [2006] 814号) (Notice on the distribution of Guangdong province's key energy consuming enterprises "dual thousand enterprise energy conservation initiative" implementation plan [Guangdong Economic and Trade Commission document 814, 2006]). [www.gdei.gov.cn/zwgk/tzgg/2006/200612/t20061205\\_54132.html](http://www.gdei.gov.cn/zwgk/tzgg/2006/200612/t20061205_54132.html).
- Guangdong Province Economic and Trade Commission (2008) 关于调整广东省千家企业节能行动企业名单及进一步加强节能监管的通知 (粤经贸环资 [2008] 643号) (Notice on adjusting Guangdong province's thousand enterprise energy conservation initiative enterprise list and progressively strengthening energy conservation supervision [Guangdong Economic and Trade Commission document 643, 2008]). [www.gddpc.gov.cn/fgzl/nygz/nyzc/200812/t20081210\\_27156.htm](http://www.gddpc.gov.cn/fgzl/nygz/nyzc/200812/t20081210_27156.htm).
- Guangdong Province People's Government (2006a) 广东省国民经济和社会发展十一五规划纲要 (Guangdong province's eleventh five-year plan for economic and social development). Mar. 10. [www.gd.gov.cn/govpub/fzgh/sywgy/0200607260010.htm](http://www.gd.gov.cn/govpub/fzgh/sywgy/0200607260010.htm).
- Guangdong Province People's Government (2006b) 关于进一步加强广东省节能工作的意见 (粤府 [2006] 120号) (Opinions on the progressive strengthening of Guangdong province's energy conservation work [Guangdong government document 120, 2006]). <http://search.gd.gov.cn/detail?record=251&channelid=8907>.
- Guangdong Province People's Government (2006c) 关于印发广东省“十一五”期间单位生产总值能源消耗降低指标计划分解方案的通知 (粤府 [2006] 125号) (Notice on the dissemination of the target allocation plan for Guangdong province's unit-GDP energy conservation plan during the eleventh five-year plan [Guangdong government document 125, 2006]). No longer available online.
- Guangdong Province People's Government (2007) 关于印发广东省节能减排综合性工作方案的通知 (粤府 [2007] 66号) (Notice of the publication of a comprehensive work plan for Guangdong province's energy conservation and emissions reduction [Guangdong government document 66, 2007]). <http://search.gd.gov.cn/detail?record=164&channelid=8907>.
- Guangdong Province People's Government Office (2008) 关于印发广东省单位GDP能耗考核体系实施方案的通知 (粤府办 [2008] 20号) (Notice of the dissemination of the implementation plan for methods to implement Guangdong province's unit-GDP energy conservation evaluation system [Guangdong government office document 20, 2006]). <http://search.gd.gov.cn/detail?record=66&channelid=8907>.
- GUI SHIYONG 桂世镛, WEI LIQUN 魏礼群, and ZHENG XINLI 郑新立 [eds.] (1994) 中国计划体制改革 (Reforming China's planning system). Beijing: Zhongguo caizheng jingji chubanshe.
- HAMRIN, CAROL LEE and SUISHENG ZHAO [eds.] (1995) Decision-Making in Deng's China: Perspectives from Insiders. Armonk, NY: M.E. Sharpe.
- HEILMANN, SEBASTIAN (2008) "Policy experimentation in China's economic rise." *Studies in Comparative International Development* 43, 1: 1-26.

- HEILMANN, SEBASTIAN (2010) "Economic governance: authoritarian upgrading and innovative potential." Pp. 109–26 in Joseph Fewsmith (ed.), *China Today, China Tomorrow: Domestic Politics, Economy, and Society*. Lanham, MD: Rowman & Littlefield.
- HEILMANN, SEBASTIAN (2011) "Making plans for markets: policies for the long term in China." *Harvard Asia Q.* 13, 2: 33–40.
- HEILMANN, SEBASTIAN (2012) "China's core executive in economic policy." Paper presented at the conference "Power in the Making: Governing and Being Governed in Contemporary China," Oxford Univ., Mar. 2012.
- HEILMANN, SEBASTIAN, ANDREAS HOFEM, and LEA SHIH (2013) "National planning and local technology zones: experimental governance in China's torch program." *China Q.* (forthcoming).
- HEILMANN, SEBASTIAN and ELIZABETH J. PERRY (2011) "Embracing uncertainty: guerrilla policy style and adaptive governance." Pp. 1–29 in Heilmann and Perry (eds.), *Mao's Invisible Hand: The Political Foundations of Adaptive Governance in China*. Cambridge, MA: Harvard Univ. Press.
- HOWLETT, MICHAEL, M. RAMESH, and ANTHONY PERL (2009) *Studying Public Policy: Policy Cycles and Policy Subsystems*. 3rd ed. Toronto: Oxford Univ. Press.
- HSÜ, ROBERT C. (1986) "The political economy of guidance planning in post-Mao China." *Rev. of World Economics* 122, 2: 382–94.
- HU ANGANG 胡鞍钢 and YAN YILONG 鄢一龙 (2010) *中国: 走向2015 (China: heading toward 2015)*. Hangzhou: Zhejiang renmin chubanshe.
- HU ANGANG 胡鞍钢, WANG YAHUA 王亚华, and YAN YILONG 鄢一龙 (2008) "国家 '十一五' 规划纲要实施进展评估报告" (Evaluation report on the implementation and progress of China's eleventh five-year plan outline). *宏观经济管理* 10: 13–17.
- HUANG, YASHENG (2008) *Capitalism with Chinese Characteristics*. Cambridge: Cambridge Univ. Press.
- KOSTKA, GENIA and WILLIAM HOBBS (2012) "Local energy efficiency policy implementation in China: bridging the gap between national priorities and local interests." *China Q.* 211: 765–85.
- LAI RUI 赖睿 (2010) "更加开放自信的中国: '十二五' 规划向全球取经" (A more open self-confident China: twelfth five-year plan looking to the world for ideas). *People's Daily overseas ed.*, Feb 3. <http://cppcc.people.com.cn/GB/34952/10916092.html>.
- LEVINE, MARK, LYNN PRICE, ZHOU NAN, DAVID FRIDLEY, NATHANIEL ADEN, LU HONGYOU, MICHAEL MCNEIL, NINA ZHENG, and QIN YINING (2010) "Assessment of China's energy-saving and emission-reduction accomplishments and opportunities during the 11th five-year plan." Lawrence Berkeley National Laboratory. <http://china.lbl.gov/publications/the-ace-study>.
- LI GUANGCUN 李广存 (2009) *干部考核 (Cadre appraisals)*. Beijing: Dangjian duwu.
- LI PENG 李鹏 (2007) *市场与调控: 李鹏经济日记 (Markets and [government] controls: Li Peng's economic diaries)*. Beijing: Xinhua chubanshe.

- LI PUMIN 李朴民 and LI BING 李冰 (2001) “‘九五’时期我国计划体制改革回顾” (A retrospective on planning system reform in China during the ninth five-year plan period). *宏观经济研究* 2: 24–26.
- LIEW, LONG H. (1997) *The Chinese Economy in Transition: From Plan to Market*. London: Edward Elgar.
- LIU GUOGUANG 刘国光 [ed.] (2006) *中国十个五年计划研究报告* (Research report on ten Chinese five-year plans). Beijing: Renmin chubanshe.
- LIU RIXIN 刘日新 (2006) *新中国经济建设简史* (A brief history of economic construction in new China). Beijing: Zhongyang wenxian chubanshe.
- MA KAI 马凯 (2006) “‘十一五规划纲要’的编制过程和定位” (Drafting process and orientation of the eleventh five-year plan outline). *经济日报*, April 18.
- MCGREGOR, RICHARD (2010) *The Party: The Secret World of China's Communist Rulers*. New York: HarperCollins.
- MELTON, OLIVER (2010) “Understanding China's five-year plan: planned economy or coordinated chaos?” *China Insight Economics* (GaveKalDragonomics), Nov 9: 1–19.
- MOHAN, RAKESH and VANDANA AGGARWAL (1990) “Commands and controls: planning for Indian industrial development, 1951–1990.” *J. of Comparative Economics* 14: 681–712.
- NAUGHTON, BARRY (1990) “China's experience with guidance planning.” *J. of Comparative Economics* 14: 743–67.
- NAUGHTON, BARRY (1995) *Growing Out of the Plan: Chinese Economic Reform, 1978–1993*. New York: Cambridge Univ. Press.
- NAUGHTON, BARRY (2006) “The new common economic program: China's eleventh five-year plan and what it means.” *China Leadership Monitor* 16.
- NAUGHTON, BARRY (2007) *The Chinese Economy: Transitions and Growth*. Cambridge, MA: MIT Press.
- NDRC [National Development and Reform Commission] (2004) *节能中长期专项规划* (Medium and long-term energy conservation plan). [www.ndrc.gov.cn/xwfb/t20050628\\_27571.htm](http://www.ndrc.gov.cn/xwfb/t20050628_27571.htm).
- NDRC (2006a) 关于印发千家企业节能行动实施方案的通知 (发改环资 [2006] 571号) (Notice on the issuance of the implementation plan for the Thousand Enterprise energy conservation initiative [Department of Resource Conservation and Environmental Protection document 71, 2006]). [http://hzs.ndrc.gov.cn/new-zwxx/t20060413\\_66111.htm](http://hzs.ndrc.gov.cn/new-zwxx/t20060413_66111.htm).
- NDRC (2006b) 关于加强固定资产投资项目节能评估和审查工作的通知 (发改投资 [2006] 2787号) (Notice on strengthening evaluation and inspections of fixed asset investment programs' energy conservation [NDRC Investment Office document 2787, 2006]). [www.gzqdc.com/detail1.asp?id=20070125165157594723](http://www.gzqdc.com/detail1.asp?id=20070125165157594723).
- NDRC (2006c) 关于印发千家企业节能行动实施方案的通知 (发改环资 [2006] 571号) (NDRC Resource Conservation and Environmental Protection Office document 571, 2006). [www.ndrc.gov.cn/zcfb/zcfbtz/tz2006/t20060414\\_66211.htm](http://www.ndrc.gov.cn/zcfb/zcfbtz/tz2006/t20060414_66211.htm).

- NDRC (2007) 关于印发固定资产投资节能评估和审查指南 [2006] 的通知 (发改环资 [2007] 21号) (Notice on the dissemination of the 2006 Handbook on evaluation and inspection of fixed asset investment programs' energy conservation). [www.ndrc.gov.cn/zcfb/zcfbtz/2007tongzhi/t20070112\\_110694.htm](http://www.ndrc.gov.cn/zcfb/zcfbtz/2007tongzhi/t20070112_110694.htm).
- NDRC (2010) 关于印发促进中部地区崛起规划实施意见的通知 (Circular on disseminating the implementation instructions on the plan for promoting the rise of the central regions). 发改地区 (NDRC Division on Regional Development) 1827号. Aug. 12. [www.ndrc.gov.cn/zcfb/zcfbtz/2010tz/t20100825\\_367456.htm](http://www.ndrc.gov.cn/zcfb/zcfbtz/2010tz/t20100825_367456.htm).
- PENG SEN 彭森 (2010) “多层次改革试点格局基本形成” (Pattern of multilevel reform pilots basically in place). Xinhua, June 7. [http://news.xinhuanet.com/politics/2010-06/07/c\\_12192753.htm](http://news.xinhuanet.com/politics/2010-06/07/c_12192753.htm).
- SHI QINGQI, YANG XIAOBING, and HUANG TIANHUA (1993) “Changing patterns of development planning in China.” Pp. 91–114 in Somsak Tambunlertchai and S. P. Gupta (eds.), *Development Planning in Asia*. Kuala Lumpur: Asian and Pacific Development Centre.
- SHIRK, SUSAN L. (1993) *The Political Logic of Economic Reform in China*. Berkeley: Univ. of California Press.
- Southern Media Group 南方网 (2006) 粤21地市签订节能“军令状” 降耗目标将纳入政绩考核 (Guangdong's 21 prefecture cities signed “military order” consumption targets for energy conservation that will enter government performance evaluations). Dec 15. [www.southcn.com/news/gdnews/nanyuedadi/200612150699.htm](http://www.southcn.com/news/gdnews/nanyuedadi/200612150699.htm).
- State Council (2005) 国务院关于加强国民经济和社会发展规划编制工作的若干意见 (国发 [2005] 33号) (State Council opinions on strengthening drafting work for the national economic and social development plan [State Council document 33, 2005]). [www.gov.cn/zwgk/2005-10/26/content\\_84417.htm](http://www.gov.cn/zwgk/2005-10/26/content_84417.htm).
- State Council (2006a) 中华人民共和国国民经济和社会发展第十一个五年规划纲要 (China's eleventh five-year plan for national economic and social development). [www.gov.cn/ztlz/2006-03/16/content\\_228841.htm](http://www.gov.cn/ztlz/2006-03/16/content_228841.htm).
- State Council (2006b) 国务院关于印发“十一五”期间各地区单位生产总值能源消耗降低指标计划的批复 (国函 [2006] 94号) (State Council on the approval of the plan for the eleventh five-year plan period regional unit-GDP energy consumption reduction standards [State Council document 94, 2006]). [www.gov.cn/gongbao/content/2006/content\\_443285.htm](http://www.gov.cn/gongbao/content/2006/content_443285.htm).
- State Council (2006c) 国务院关于加强节能工作的决定 (国发 [2006] 28号) (State Council decision on strengthening energy conservation work [State Council document 28, 2006]). [www.gov.cn/zwgk/2006-08/23/content\\_368136.htm](http://www.gov.cn/zwgk/2006-08/23/content_368136.htm).
- State Council (2006d) 国务院关于印发《中华人民共和国国民经济和社会发展第十一个五年规划纲要》主要目标和任务分工的通知 (国发 [2006] 29号) (State Council notice on the division of major targets and responsibilities for the implementation of the “China's eleventh five-year plan for national economic and social development” [State Council document 29, 2006]). [www.gov.cn/gongbao/content/2006/content\\_413969.htm](http://www.gov.cn/gongbao/content/2006/content_413969.htm).

- State Council (2007a) 国务院批转节能减排统计监测及考核实施方案和办法的通知 (国发 [2007] 36号) (State Council notice on the approval of methods for implementing energy conservation and emissions reduction statistical monitoring and evaluation [State Council document 36, 2007]). [www.gov.cn/zwgg/2007-11/23/content\\_813617.htm](http://www.gov.cn/zwgg/2007-11/23/content_813617.htm).
- State Council (2007b) 国务院关于印发节能减排综合性工作方案的 通知 (国发 [2007]15号) (State Council notice on a comprehensive work plan to implement energy conservation and emissions reduction [State Council document 15, 2007]). [www.5izixun.com/fagui/show.asp?id=2155](http://www.5izixun.com/fagui/show.asp?id=2155).
- State Council (2009) 国务院关于推进重庆市统筹城乡改革和发展的意见 (Opinions of the State Council on furthering urban-rural integrated reform in Chongqing municipality). State Council document 13, Jan. [www.gov.cn/zwgg/2009-02/05/content\\_1222355.htm](http://www.gov.cn/zwgg/2009-02/05/content_1222355.htm).
- State Council (2011) 国民经济和社会发展第十二个五年规划纲要 (The twelfth five-year plan for national economic and social development). [http://news.xinhuanet.com/politics/2011-03/16/c\\_121193916.htm](http://news.xinhuanet.com/politics/2011-03/16/c_121193916.htm).
- TIAN JINJIAN 田锦尖 (2010) “规划指标的设计与测算” (Designing and calculating plan targets). Pp. 145–61 in Yang Weimin, 2010.
- TODARO, MICHAEL P. and STEPHEN C. SMITH (2006) *Economic Development*. London: Pearson.
- WANG LIXIN and JOSEPH FEWSMITH (1995) “Bulwark of the planned economy: the structure and role of the State Planning Commission.” Pp. 51–65 in Hamrin and Zhao, 1995.
- WANG YAHUA 王亚华 and YAN YILONG 鄢一龙 (2007) “十个五年计划的制定过程与决策机制” (Drafting processes and decision mechanisms for ten five-year plans). *宏观经济管理* 5: 67–70.
- WU HONGYING 吴红缨 (2009) “综改成重庆‘两会’重中之重” (Comprehensive reform becomes top priority of Chongqing’s “two sessions”). *21世纪经济报道*, Jan. 10.
- WU LI 武力 (2006) “中华人民共和国实施计划管理的基础和条件” (Foundations and conditions of implementing plan administration in the PRC). Pp. 1–51 in Liu Guogang, 2006.
- XIANG WEI 相伟 (2009) “对十二五规划 编制的思考” (Reflections on drafting the twelfth five-year plan). *宏观经济管理* 1: 38–40.
- Xinhua News (2008) “‘十一·五’规划实施总体进展良好: 经济社会发展主要指标大多达到预期进度要求” (Implementation of the ‘eleventh five-year plan’ is progressing well: the majority of major economic and social development targets are on schedule). Dec 24. [http://news.xinhuanet.com/newscenter/2008-12/24/content\\_10554035.htm](http://news.xinhuanet.com/newscenter/2008-12/24/content_10554035.htm).
- XU LIN 徐林 (2010) “规划编程序程和评估制度” (Plan drafting procedures and evaluation institutions). Pp. 163–79 in Yang Weimin, 2010.
- YABUKI, SUSUMU (1995) *China’s New Political Economy*. Boulder, CO: Westview.

- YANG, DALI (1997) *Beyond Beijing: Liberalization and the Regions in China*. London: Routledge.
- YANG WEIMIN 杨伟民 (2003) “我国规划体制改革的任务及方向” (Mission and direction of reforming China’s planning system). *宏观经济管理* 4: 4–8.
- YANG WEIMIN [ed.] (2010) *发展规划的理论和实践* (The theory and practice of development planning). Beijing: Qinghua daxue chubanshe.
- YAO, ROSEALEA and ARTHUR KROEBER (2010) “Energy efficiency: damned statistics.” *China Economic Q.* 14, 3: 6–8.
- YU DONGHUI 余东晖 (2001) 两会前奏:“十五”计划是怎样制定出来的? (Prelude to the National People’s Congress and Chinese People’s Political Consultative Congress: how is the tenth five-year plan formulated?). *China News Service*, Feb 26. [www.chinanews.com/2001-02-27/26/73800.html](http://www.chinanews.com/2001-02-27/26/73800.html).
- ZHANG ZHUOYUAN 张卓元 and LU YAO 路遥 (2006) “第十个五年计划的制定与实施” (Formulation and implementation of the tenth five-year plan). Pp. 661–703 in Liu Guogang, 2006.
- ZHAO XIAOHUI (2007) “中国推行严格的节能减排问责制” (China to strictly carry out an energy efficiency and pollution reduction responsibility system). *Xinhua*, April 28. [http://news.xinhuanet.com/politics/2007-04/28/content\\_6041195.htm](http://news.xinhuanet.com/politics/2007-04/28/content_6041195.htm).
- ZHONG QIFU 钟契夫 (2007) *钟契夫自选集* (Selected works of Zhong Qifu). Beijing: Zhongguo renmin daxue chubanshe.
- ZHU BAOZHI 朱宝芝 (2010) “国家专项规划的编制与管理” (Drafting and administering national special plans). Pp. 99–109 in Yang Weimin, 2010.
- ZHU ZHIXIN 朱之鑫 [ed.] (2009) ‘十一五’规划实施中期评估报告 (Mid-term evaluation reports on the implementation of the eleventh five-year plan). Beijing: Zhongguo renkou chubanshe.

### Author Biographies

**Sebastian Heilmann** is founding director of the Mercator Institute for China Studies (MERICS) in Berlin and a professor of political economy of China at the University of Trier, Germany.

**Oliver Melton** is an analyst with the U.S. Department of State.