Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of:
Federal Ministry for Economic Affairs and Energy

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Energy in China Newsletter

Bimonthly news on China's latest regulatory, technological and industrial development in energy sector
A service of the Energy Sector in GIZ China

Dear readers,

with a two-month delay, the "Two Sessions" – the National People's Congress and the Chinese People's Political Consultative Conference – convened in Beijing in late May. For the first time since 1990, the Prime Minister's work report did not set a growth target for the Chinese economy – the uncertainties caused by the corona pandemic remain yet too great. LI Keqiang mentioned energy policy – traditionally not a priority topic in the government declaration – in just a few sentences: "We will boost the development of energy saving and environmental protection industries[...]. We will safeguard energy security. We will promote cleaner and more efficient use of coal, develop renewable energy, improve systems for the production, supply, and sale of oil, natural gas, and electricity, and bolster our energy reserve capacity."

A few weeks later, NEA and NDRC put Mr. LI's word into practice and published guiding opinions on the energy security work for 2020. To ensure the availability of energy for the upcoming economic recovery, NEA raised this year's primary energy consumption target to 5 billion tons of coal equivalent – the upper most limit of the 13th Five-Year Plan (2016-2020). Coal remains an ambiguous topic. NEA moderately reduced the target for the share of coal in primary energy consumption to 57.5%. (China reached 57.7% at the end of last year.) While China excluded clean coal from a list eligible for green bonds, the country still aims at increasing coal capacity and reaching 1,100 GW by the end of 2020. Greenpeace reported that at least 48 GW of new coal-fired power plants are either approved, under construction or newly completed. SASAC, a state-owned enterprises watchdog, however, released plans for the regional integration of coal assets, potentially cutting capacities in the mid-term.

As Beijing is returning from a recent lockdown, we are accelerating our activities. Just last week, BMWi and NDRC met virtually to discuss energy efficiency policies and future cooperation topics. Coming up: a webinar series on biomethane, a webinar and conference on energy storage, and our next local business advisory council with the German industry. We wish you an enjoyable and interesting read.

Kind Regards,
Yuxia Yin and Anders Hove
and the energy team at GIZ China

Project news

Virtual meeting on energy efficiency strategy and policies between BMWi and NDRC

On 9 July, the German Federal Ministry for Economic Affairs and Energy (BMWi) and the National Development and Reform Commission (NDRC) held a working-level virtual meeting in the framework of the Sino-German Energy Partnership. Topics discussed included, amongst others, the current economic crisis and its impact on international business operations, green recovery, Germany's Energy Efficiency Strategy 2050, China's next Five-Year Plan (14FYP), and recent developments in both sides' energy efficiency policies.

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Participants from BMWi, NDRC and GIZ during the virtual meeting

About the projects

On behalf of the Federal Ministry for Economic Affairs and Energy (BMWi), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH implements the Sino-German Energy Partnership (EP) and the Sino-German Energy Transition project. On the Chinese side, the Energy Partnership is chaired by the National Development and Reform Commission (NDRC) and the National Energy Administration (NEA). The Energy Partnership focuses on policy advice and exchange regarding energy efficiency and renewable energies on national level. Furthermore, the Energy Partnership provides a platform for fostering private sector cooperation. The Energy Transition project focuses on supporting research cooperation between German and Chinese think tanks on all aspects of the low-carbon energy transition. As implementing agency, GIZ has established offices in Beijing and Berlin serving as an information platform and point of contact for all involved and interested parties.

Upcoming Events

Report and webinars: German biomethane experiences for China

With several reforms of the biomass sector underway, the Chinese biomethane industry is anticipating accelerated growth in the 2020s. Therefore, China is actively seeking both policy advice and technological upgrading for its biomethane processes. Against this backdrop, GIZ has commissioned the Institute for Biogas, Waste Management and Energy to draft a report on incentives, business models, technologies and standards for biomethane production and natural gas grid injection in Germany. The report will be disseminated in two webinars on July 30 and 31, together with the Chinese Biomass Energy Industry and Promotion Association (BEIPA). More than 100 experts and decision makers from the public sector, academia, and industry are expected to attend. For more information, please contact Mr. Maximilian Ryssel (maximilian.ryssel@giz.de).

Report, conference and webinar on energy storage in Germany

Energy storage is key for a successful grid-integration of an ever-increasing share of intermittent renewable energies. Since 2019, Germany and China actively exchange on the topic in the Energy Partnership's framework. GIZ has commissioned Fraunhofer ISI to write a report on Germany's experiences in energy storage, with emphasis on policies, incentives, and market and business models. The report will be published at this year's Energy Storage International Conference and Expo (ESIE2020) on August 26-28 in Beijing hosted by the China Energy Storage Alliance (CNESA). Furthermore, the Energy Partnership will host a second webinar for dissemination and discussion of the report in early September. For more information, please contact Mr. Tim Nees (tim.nees@giz.de).

Fifth meeting of the local business advisory council

The local business advisory council is a closed-door meeting for German business and government representatives to discuss opportunities and concerns in regard to the Chinese market framework. The objective of the business advisory council is to bring the voice of the private sector to the attention of political decision-makers and to improve the business climate for German companies in the renewable energy and energy efficiency sectors. The next council meeting will focus on trade and project financing and take place digitally on 13 August 2020 (to be confirmed). Participants are invited to share experiences and to discuss possible solutions together. For further information about the event, please contact Mr. Tim Nees (tim.nees@giz.de).

Energy policy, reform & general

NEA lists energy security as priority for energy policy work in 2020

In late June, NEA issued guiding opinions on energy work and policies for this year (2020). Due to the impact of COVID-19 on the global economy, this year's guiding opinions emphasize energy security (s. article below). In order to secure the energy supply, China aims at producing 193 million tons of oil, 181 billion cubic meters of natural gas and reaching an installed capacity of non-fossil fuels of 900 GW (2019: 820 GW). NEA raised the primary energy consumption target to 5 billion tons of standard coal – compared to 4.55 billion tons of standard coal mentioned in NEA guiding opinions in 2018. Hence, the energy consumption target is now set at the upper most limit of the consumption cap stipulated in the 13th Five-Year Plan (2016-2020) and shall ensure sufficient energy supply for economic recovery. The target for the share of coal in total energy consumption was reduced from 59% (in 2018) to 57.5% indicating gradual progress on reducing (relative) coal utilization. China reached 57.7% at the end of last year. Other than energy security, NEA introduced a new priority: "energy for the benefit of society."

Source 1 - Policy (CHN)
Source 2 - Further Reading (ENG)

NDRC and NEA publish guiding opinion on 2020 energy security work

NDRC and NEA released a guiding opinion on 2020 energy security work on 12 June, to promote high-quality energy development and improve energy security and safety capacity. The opinion outlines five areas in which the improvement could take place. The first area is to improve the energy supply capacity by accelerating the decommissioning of old coal plants that do not meet safety and environmental protection requirements, building coal-wind-solar-storage pilot projects in West China, and increasing domestic oil and gas production. The target for total hydro capacity is set to be 340 GW and that for wind and PV is 240 GW each. The second area is to promote the construction of energy transportation, such as coal railways, transmission grids, port capacity, and oil and gas pipelines. The third area is to strengthen energy storage capabilities through coal storage, power system regulation and gas storage infrastructure. The fourth area is to better manage energy demand through demand-side management, energy efficiency measures, peak-shaving capacity of natural gas, and the establishment of energy markets. The last area is to strengthen safeguard measures such as emergency planning, energy monitoring, and early warning systems that evaluate the need for coal power in each province according to the analysis of capacity adequacy and resource constraints.

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Two Sessions: Growth target sacked; NEA discusses energy development

From 22 to 29 May, the "Two Sessions", the National People's Congress and the Chinese People's Political Consultative Conference, convened in Beijing – two months later than usual due to the coronavirus pandemic. A growth target for the Chinese economy, which is usually proclaimed by the Prime Minister in the government declaration, was not announced this year. According to NDRC Director Mr. HE Lifeng, the uncertainties caused by COVID-19 and its impact on the global economy were too great to set robust targets. HE also emphasized that securing employment, livelihoods of people, SMEs, food and energy security, supply chain stability, operations and finances of local government agencies are high priorities. NEA Minister Mr. ZHANG Jianhua emphasized that everything is being done in the energy sector to ensure the security of supply and to meet the challenge of COVID-19. In Mr. ZHANG's view, the energy sector continues to provide a good framework for growth and the crisis is also providing new impetus for more sustainable development. He highlighted various central tasks as focal points for the energy sector in 2020. The binding energy targets set out in the 13th Five-Year Plan should continue to be pursued and achieved. Nationally determined regional development strategies are to be supported and the 14th Five-Year Plan, which has the high-quality development of the sector as its goal, is to be promoted.

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Guiding opinion on accelerating development in western China points out energy development trend

The 'Guiding Opinion on New Statuses and Trends of Western Region Development' issued by the Communist Party of China (CPC) and the State Council has pointed out several important trends, including energy development, for the western provinces of China. One of the priorities is to improve the energy supply and demand structure in western provinces, so that by 2035 these regions can reach an almost equivalent level with eastern provinces, regarding modernization, access to basic public services, infrastructure interconnectivity, and living standards. In the field of energy, the document emphasizes to (1) improve coal production and consumption mix, including clean and efficient use of coal, and demonstration of coal conversion projects; (2) build oil and gas production bases in western provinces; in terms of renewables (3) strengthen renewables electricity local consumption, as well as UHV transmissions to the eastern region. It is also worth mentioning that the document proposed the upgrading of distribution grids – for the first time on national level, which is crucial for promoting local consumption of renewable energies. The guiding opinion also mentions supporting energy-intensive industries, qualified in terms of environmental protection and energy efficiency standards, to relocate to the west, where clean energy sources are abundant.

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NDRC and NEA jointly issued medium- and long-term power trading principles

In June, NDRC and NEA jointly issued a set of principles for medium-and long-term power trading – which in China refers to monthly and yearly power contracts. This revises a previous document that set provisional trading principles. Compared with the provisional principles, the document now includes distribution, wholesale and energy storage companies as market participants. The type of medium- and long-term trading products are also diversified to include trading of electricity itself, generation trading rights, and contract transfer. Transmission rights and capacity can also be traded when there is need in the market. Price is determined solely by the market, and not subject to third party interference. Market users now need to pay for ancillary services. Wholesale power producers, end-users, and grid companies are responsible for ensuring full consumption of clean energy. In terms of balancing the amount of agreed electricity trading amount and the actual needs in the market, the document permits adjustments to be made one week before contract execution upon mutual agreement. The document also encourages trans-regional and trans-provincial power trading.

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MIIT kicks off 2020 energy efficiency diagnoses in industry

The Ministry of Industry and Information Technology (MIIT) issued instructions for the implementation of energy audits in 2020, instructing provincial IIT offices to draw up work plans for the implementation of energy diagnoses in industry. Energy audits are to be implemented in 300 companies per province. Furthermore, industry associations are called upon to conduct energy audits in various sectors, including the manufacturing industry and in the energy sector. Provincial governments are encouraged to establish support mechanisms and financing for the implementation of energy audits and measures to be provided. Participation in energy audits is voluntary for companies.

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Renewable energy

NEA calls for public comments on establishing long-term mechanism for clean energy consumption

NEA has released a draft 'Guiding Opinion on Establishing and Improving Long-Term Mechanisms for Clean Energy Consumption', which discusses how near-term targets for renewable energy are set at the provincial level, urges the acceleration of the spot market and ancillary services markets, and suggests coordination of existing mechanisms such as green certificates, renewable obligations, and the coming spot market. The draft also lists areas for promotion including electric heating, flexible EV charging, hybrid wind-solar-storage plants, and renewable hydrogen. GIZ, together with ClientEarth and other international organizations, jointly submitted comments to the draft, welcoming the promulgation of this policy and arguing for greater emphasis on long-term incentives instead of setting near-term limits on renewables.

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NEA releases provincial renewable energy consumption data for 2019 and cuts 2020 provincial renewable obligation targets for nine regions

In recent years, China has sought to guide renewable energy development by setting short-term (1-2 year) quotas for the consumption of renewable energy at the provincial level. On 6 May, NEA published the monitoring and evaluation report on 2019 renewable energy development, showing the actual electricity consumption profile of each province. While most of the provinces improved on their

RE percentage share in 2019, four provinces experienced a lower non-hydro RE percentage share in 2019 than that in 2018, these are Inner Mongolia, Hunan, Ningxia and Xijiang. Two weeks later, on 18 May, NEA issued revised 2020 renewable energy quotas, modifying earlier provincial quotas. Since six provinces failed to reach their quotas for non-hydro renewables set in May 2019 (namely: Hebei, Inner Mongolia, Hubei, Hunan, Gansu, Xinjiang), all of these six provinces were set a lower RE obligation for 2020 than their 2019 goals. Three other provinces/municipalities also set a lower minimum RE obligation targets (compared to the earlier version for 2020): Beijing, Tianjin and Qinghai.

Source 1: NEA
Source 2: NDRC

RMB 423.3 million is rewarded to rural hydro projects and exploitation of unconventional natural gas in 18 provinces

The Ministry of Finance has established a special fund for clean energy and fossil fuel development for the period 2020-2024 to reward rural hydro efficiency enhancement and capacity expansion projects during the 13th Five-Year Plan period as well as the exploitation of unconventional natural gas. Unconventional natural gas includes coalbed methane, shale gas and tight-sand gas. The fund is RMB 423.3 million covering 18 provinces. The period of implementation of the special fund is 2020-2024. The recipients need to apply for renewal in accordance with the procedures, when the implementation period is over.

Source 1 - Interim Measures
Source 2 - Budget

Coal, oil & gas

China electricity supply and demand analysis report 2020

State Grid Energy Research Institute published the China electricity supply and demand analysis report for 2020 in July. The report shows the impact of COVID-19 on the economy and electricity demand. In February and March 2020, electricity consumption fell 6.5% versus the prior year, but returned quickly to within 5% of prior year levels in April. The report estimates 2020 electricity consumption will rise by 1.5-3.5% compared to 2019. By the end of 2020, wind installed capacity will reach 250 GW and solar 240 GW. The report also predicts that the total utilization hours for thermal (coal and gas) plants will fall by 80 hours to 4210 hours, which will likely push more coal plants into unprofitable territory just as China's provinces are pushing through over 40 GW of new power plants. Most importantly, the report calls for a major build-out in new coal power capacity to 2025 based on expectations for rising electricity demand, and marks three provinces—Hunan, Henan and Jiangxi—as having a tight electricity supplies, despite being located adjacent to regions within the same grid that have ample surplus capacity. Carbon emissions are not mentioned in the report. The results highlight that China remains far from having an integrated regional electricity market to balance supply and demand, and grid planners presently do not take China's carbon emissions into consideration when making long-range investment plans. Coal is seen as the main way to meet demand growth despite calls in the Work Report of the National People's Congress that renewable energy should meet most incremental energy demand.

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China excludes clean coal projects from list eligible for green bonds

China's central bank excludes clean coal projects from a draft list eligible for green bonds. The proposed list is an important signal in the strongly coal-dependent country to acknowledge the role of green technologies in the future energy system. The decision has been a long time coming, as China seeks to align its Green Bonds with international standards to increase the market's attractiveness for foreign investments. Despite the recently proposed revision of the list, a large share of green bonds already met international standards. In 2019, China issued 49 billion EUR of green bonds of which 27 billion EUR met international standards - making the country the second-largest issuer after the United States.

Source 1 (ENG)
Source 2 (ENG)
Source 3 (CHN)

State-Owned Assets Supervision and Administration Commission (SASAC) releases list of coal power assets to be transferred in coal sector integration

Follow up on "Regional integration of state companies in the coal sector" in "Energie in China" Newsletter - Issue no. 45, January 2020

On 27 May, the State-Owned Assets Supervision and Administration Commission (SASAC) released a list of the first batch of coal power plants, each owned by one of the "Big Five" power suppliers, that are to be transferred to a different Big Five supplier. The Big Five enterprises are: China Huaneng, China Datang, China Huadian, the State Power Investment Corporation and China Energy. The measures apply to the provinces of Gansu, Shaanxi, Xinjiang, Qinghai, and Ningxia, where the policy is being piloted. Within one province, one of the Big Five suppliers is to receive the assets of the other four. Each of the suppliers is the receiving party in one of the provinces. The underlying objective is to improve operative efficiency, resource allocation, and to "reduce duplicative competition". This course of proceeding and the pilot provinces correspond to what was announced in a previous policy document by SASAC in 2019 (see Issue no. 45, January 2020). According to the process that was outlined there, regional integration of coal assets would be followed by closing of power stations. So far, there has not been any public information on whether the closings are occurring or when they will occur. SASAC is a ministry-level authority tasked with safeguarding and increasing the asset value of central government-owned enterprises. In this function, it aims to cut back the severe financial losses of the Big Five enterprises (RMB 38 bn in 2018) and make them more financially solid.

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China reiterates 1,100 GW of coal for end of 2020, enabling surge in new coal plant completions

In June, six ministries jointly issued plans for reducing overcapacity in key sectors in 2020. According to this plan, the target for total installation for coal capacity by the end of 2020 is 1,100 GW. Since China at year-end 2019 had around 1,040 GW of coal, this cap implies an additional 60 GW of coal for this year. This year, at least 48 GW of new coal-fired power plants are either approved, under construction, or newly completed, according to Greenpeace East Asia. More provinces have been given the green light by national authorities to approve new coal plants under the NEA's early warning system for coal plant investment, which considers environmental, resource, and economic factors.

Source 1 - NDRC (CHN)
Source 2 - China Energy News (CHN)
Source 3 - Green Peace (CHN)

Grid, energy storage & consumption

CHN Energy consortium to prepare ground for NEA hydrogen strategy

Already in April, NEA announced that China Energy Investment Corporation (CHN Energy) submitted the winning bid for the project "Special Research on the Development of the Hydrogen Industry". The study, conducted by CHN Energy together with members of the China Hydrogen Energy Alliance (amongst others: Energy Research Institute of NDRC, Tongji University, China State

Shipbuilding Corporation - CSSC, and China Aerospace Science and Technology Corporation – CASC), is seen as groundwork for a future Chinese hydrogen strategy. The study is expected to analyse the status-quo and potential of hydrogen in the Chinese energy system, discuss the production costs and hydrogen utilization in different sectors, as well as analyse the development of hydrogen in Europe, the United States, Japan and Korea.

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Business

State Council releases updated Negative List for Foreign Investment

On 24 June, the State Council released an updated version of China's Negative List for Foreign Investment and added a mechanism for overriding the listed restrictions. By relaxing restrictions in nuclear fuel and nuclear radiation processing, oil and gas exploration, and pipe network facilities, amongst others, Chinese legislators removed seven items from the list, bringing the number down to 33 (down to 30 for foreign investment in free trade zones). The European Union Chamber of Commerce in China (EUCCC), EU businesses' advocacy group in China, welcomed the changes "as another small step forward in China's reform and opening up agenda," but stated that "the relaxation[s …] are of limited significance for European Chamber members. Other changes based on previous commitments had been expected instead, such as in the automotive sector for commercial vehicles." On the new mechanisms for the State Council to override the Negative List, the EUCCC commented that "It could be used as a way to 'test' the effects of foreign investment into certain areas by allowing ad hoc approvals. If the end result is further market opening in a more timely and confident manner, then this would be positive. However, such a mechanism also raises considerable concerns. Major investment decisions require the certainty of a transparent and predictable approval system, not goodwill."

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Figure of the month

Two Sessions: word frequency in the government work report

From 22 to 29 May the "Two Sessions", the National People's Congress and the Political Consultative Conference of the Chinese People convened in Beijing. The central part was the presentation of the "Report on the work of the government" by the Premier of the State Council, Mr. Li Keqiang. The word cloud below shows the frequency of keywords in the report. With a closer look, you can find the word "Energy", mentioned ten times, ("Develop" is mentioned 78 times) in bright green.

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