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China' s Policies for Recycling Economy during the 13th Five-Year Plan

--Recycled Plastics

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Strategic Role of Recycled Plastics

Recycling--Renewed importance of strategic level



Metallic mineral: Consumption have been increasing with annual growth rate 2.7% at since 1970.



Non-metallic minerals: Mainly sand, gravel and clay, with annual consumption increasing to 44 billion ton in 2017 from 9 billion ton in 1970.



Fossil fuel: Annual consumption of coal, crude oil and gas have increased to 15 billion ton in 2017 from the 6 billion ton in 1970, while global yield decreased to 16% from 23% during the same period.



Biomass: Annual consumption have increased to 24 billion ton in 2017 from 9 billion ton in 1970.

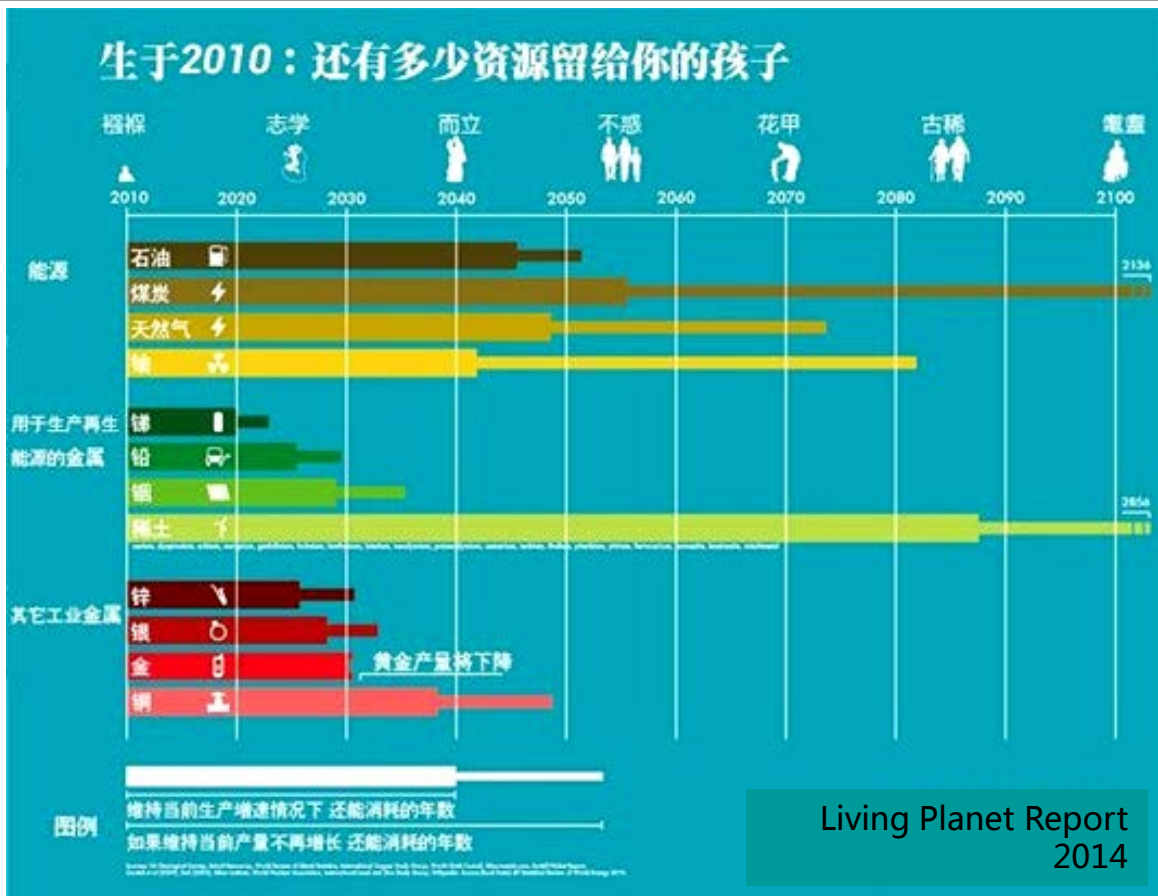


Water: Annual water intake have increased to 3,900 m³ in 2010 from 2,500 m³ in 1970, among which 70% are used in irrigating, 19% in industry, and 11% for municipal purpose.

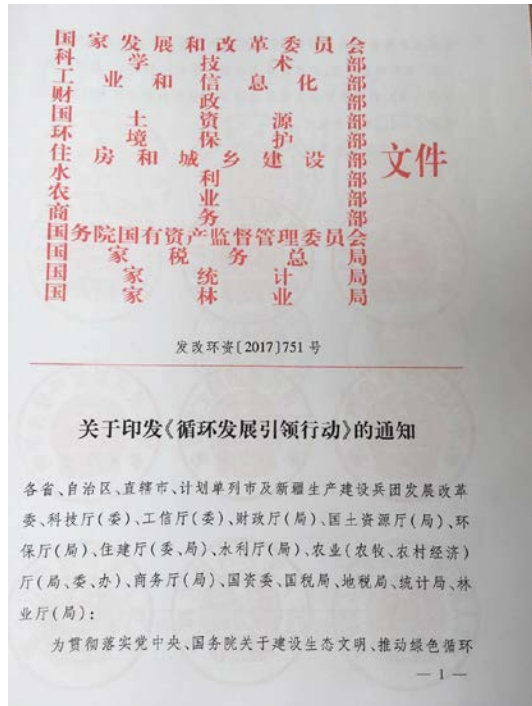


Field: Global cultivated fields have expanded to 15.2 million kilometers from 15.4 million kilometers during 2000-2010, while pasture land have shrunk to 30.9 million kilometers from 31.3 million kilometers.

Recycling--Renewed importance of strategic level



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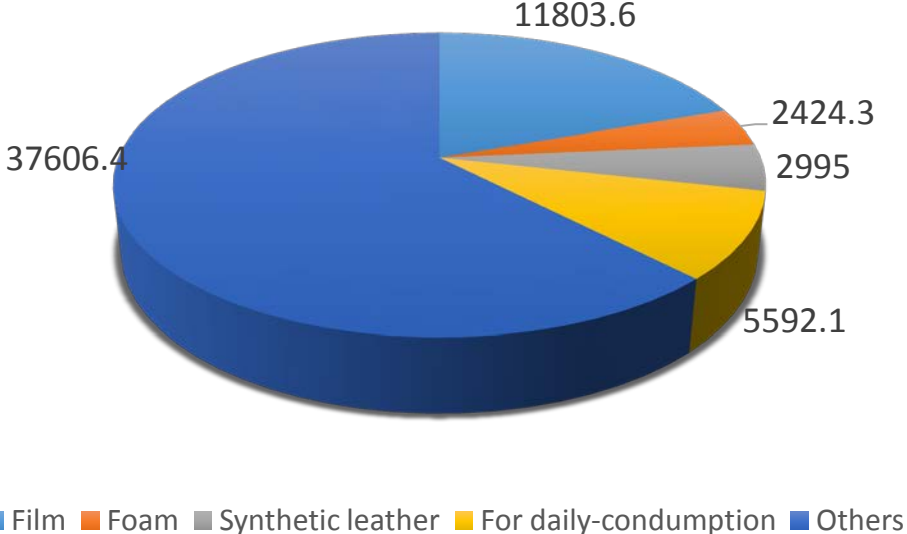


——Prominent increase in efficiency of energy and resource utilization, and efficient control of energy and water consumption, construction land and carbon emission.

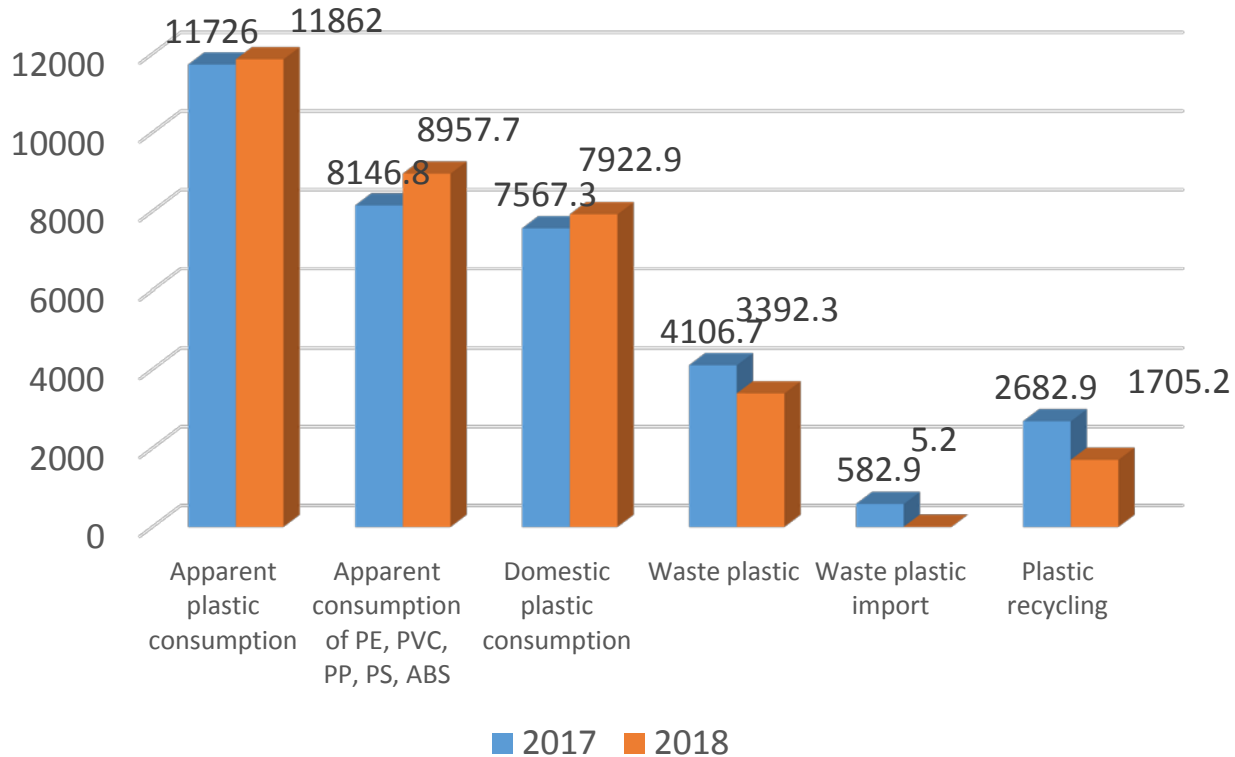
To bring forward development of recycling economy, and accelerate waste recycling.

—— Primary construction of new strategic guarantee system for resources 节约 The concept of resource saving and recycling is to prevail, and a primary recycling system shall be accomplished. Recycling industry is to become a main security measure for resource safety.

Plastic production from enterprises above designated scale in 2018 (10kt)



Recycling--Renewed importance of strategic level





Policies for Recycled Plastic Industry

The State Council: Announcement of major strategy, plan and policies of recycling economy

NDRC:

Executor: Resource Saving and Environment Protection Dept.
Main function: To decide major strategies, planning and comprehensive policies of recycling economy.

MIIT:

Executor: Energy Saving and Comprehensive Utilization Dept.
Main function: To make up policies, establish pilots and decide entry criteria of industry recycling economy.

Ministry of Environmental Protection:

Executor: Science and Technology Dept.
Main function: Environment monitoring, clean production, development of environment industry, green consumption, etc.

Ministry of Finance:

Executor: Economy Construction Dept., Tax Department
Main function: Special fund and tax policies of recycling economy

Duties of the nation's administrations

Ministry of Commerce: Executor: Dept. of Circulation Industry Development
Main function: To plan for construction of recycling system and establish recycling standards, etc.

MOST: Executor: Dept. of Social Development
Main function: To make up technology plans and make arrangement for key projects of recycling economy

MOHURD: Executor: Urban-Rural Development Dept.
Main function: Waste classification

Ministry of Agriculture: Executor: Science and Education Dept.
Main function: Recycling of post-consume agricultural film and pesticide bottles



Investment Subsidy Policies



Capital source: Special fund for ecological construction from central government's budget

Institution: NDRC Resource Saving and Environment Protection Dept.

Purpose: To support infrastructure and platform construction of national recycling bases, as well as concentrated urban waste recycling and harmless disposal.

Form: Free subsidy funds to certain proportion in total project investment

Condition: On-going or scheduled projects, with a full set of government approval of land, audit, register, EIA, energy management assessment, planning and construction permits, etc.

Frequency: Annually

Finance Discount Policy

Capital source: Special construction bond from central finance

Institution: NDRC, Ministry of Finance, China Development Bank

Purpose: To support construction of resource recycling and environment protection projects.

Form: China Development Bank carries out audit of projects, which are of NDRC's endorsement, and provides loans combined with interest preference upon the result of audit.

Condition: On-going projects, with a full set of government approval of land, audit, register, EIA, energy management assessment, planning and construction permits, etc.

Frequency: Constantly



Duty Preferences

3.7	Waste plastics, waste PVC, waste aluminum plastics, composite paper packaging	Gas, diesel, coke, carbon black, recycled pulp, aluminum powder, plastic wood, modified recycled materials, recycled PET (bottle grade) and recycled plastics	<ol style="list-style-type: none">1. Raw material from listed sources accounting for more than 70% of total2. Content of impurity in fiber grade R-PET below 0.5mg/g, with less than 1% moisture. Mass fraction of acetaldehyde in bottle grade R-PET $\leq 1\mu\text{g/g}$;3. The tax payer must hold ISO9000 and ISO14000 certificates.	50%
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《[Note about issuing the Preference List for Comprehensive Resource Utilization and Value Added Tax on Labor Service](#)》
([Fiscal and Tax No. 78 \[2015\]](#))

Green loan support: Banks and financial agencies should give more support to green economy, low-carbon economy and **recycling economy**, while improve their performance against environment and social risks, thus to optimize loan structure, provide better services and upgrade pattern of development.

Green bond support: Recycling economy projects: retrofit for recycling within industry parks **Waste recycling**, agriculture recycling, recycling economy, reproducing, etc.





Perspective of Recycled Plastic Industry

Joint efforts to limit plastics consumption worldwide

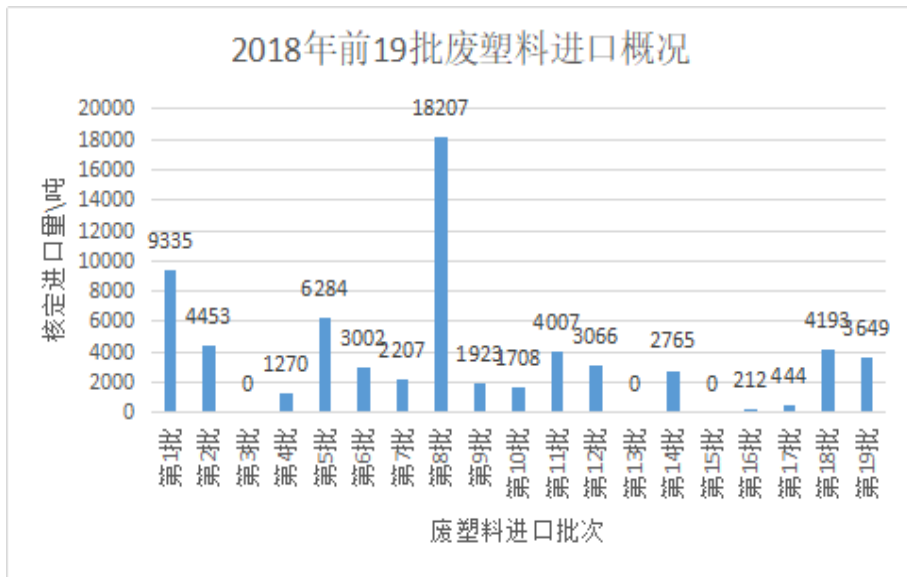
UNEP: UNEP called on governments in the world to be aware of sea pollution caused by plastic waste in 1995.

Plastic Strategy: EU launched Plastic Strategy in 2018, targeting 100% recycling of plastic packaging in EU markets by year 2030, with less consumption of disposable plastics, and application of plastic pellets will be limited.

Blue Ocean Vision: was proposed in the recent G20.

New limitation laws on plastics: There will be more detailed stipulations on application of disposable plastics and substitution with degradable plastics.

From Limitation to Banned



According to an announcement from China's Ministry of Ecology and Environment on 19 April 2018, 16 items including wasted hardware, vessel, automobile casting die, slag, plastics of industry source moved from Category of Solid Wastes as Raw Materials Limited for Import into Catalogue of Solid Wastes Forbidden from Import, effective since 31 December 2018.

Import of plastic wastes are expected to be thoroughly banned by end 2020.

Extended Producer Responsibility Will Phase in



The screenshot shows the official website of the Central People's Government of the People's Republic of China. The header includes the national emblem, the text '中华人民共和国中央人民政府' (Central People's Government of the People's Republic of China), and the URL 'www.gov.cn'. A navigation bar contains links for '国务院' (State Council), '总理' (Premier), '新闻' (News), '政策' (Policy), '互动' (Interaction), '服务' (Service), '数据' (Data), and '国情' (National Conditions). The main content area features a news article titled '国务院办公厅印发《生产者责任延伸制度推行方案》' (State Council Office Issues 'Implementation Plan for the Extension of Producer Responsibility System'). The article is dated '2017-01-03 18:05' and sourced from '新华社' (Xinhua News Agency). Social media sharing icons for WeChat, Weibo, and others are visible at the bottom of the article.

State Council proposed that Extended Producer Responsibility (EPR) shall be widely applied in fields including electrical & electronic products, scraped car, lead storage battery and composite packaging. Nowadays, EPR is widely adopted in plastic packaging sector, such as bottle, in developed countries.



Availability of recycled raw material will be secured

XV. Recycled product and raw material promoting: Raw material substitution strategy to encourage producers, particularly electrical & electronic producers to use more recycled materials. Standards and categories of recycled products and new materials. Government's preference in recycled products.

XVI. To accomplish policies to limit disposable consumer goods: To make up list and management standard for disposable products, production and sales of which shall be limited, and carry out classified management. To accomplish policies to limit disposable consumer goods.

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Thank you!

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