

Supplement Materials for

Bounded Rationality in the Developmental Trajectory of Environmental Target Policy in China, 1972-2016

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Table S1: Problem events

Event time (year-month-date)			Event description	Event no.
1972	5	1	Guanting reservoir water pollution crisis In early spring of 1972, in Guanting Reservoir, as the water source of Beijing City, many dead fishes suddenly appeared in its large area, and in the same time, some residents in surrounding regions were suffering from unexplained strange symptoms. It was just in the time of the so called Great Cultural Revolution so that although it was not publicly reported, it also attracted discussions and conjectures and even the leaders of the central authority were greatly shocked due to this really serious matter. The official organizations organized a large scope of deep investigation at the authorization of Zhou Enlai, and in the investigation, it is discovered that the water of Guanting Reservoir had been deadly contaminated and the source of the contamination were the factories in the upstream regions. This accident caused a large-scale pollution control movement. The industrial pollution taken place in Guanting Reservoir was an epitome of the environment condition of the 1970s' China. The responsibility could be claimed to the prior development strategy of heavy industries that was executing by Chinese government. This accident brought far reaching influence over China's modern environment protection cause and it directly caused the occurrence of the system of "Three Synchronization", the start-up of the environment science research and the establishment of environment supervision and control system.	1
1994	2	3	Huai River water pollution crisis	2
1995	6	5	Industrial wastewater discharge 22.2 billion tons Sulfur dioxide emissions 18.91 million tons	3

1996	6	5	Industrial wastewater discharge 20.6 billion tons Sulfur dioxide emissions 13.97 million tons	
1997	6	5	Industrial wastewater discharge 22.7 billion tons Sulfur dioxide emissions 18.52 million tons	4
1998	6	5	Industrial wastewater discharge 20.1 billion tons Sulfur dioxide emissions 15.93 million tons	5
1999	6	5	Industrial wastewater discharge 19.7 billion tons Sulfur dioxide emissions 18.58 million tons	6
2000	6	5	Domestic sewage 22.1 billion tons Industrial wastewater discharge 19.4 billion tons Sulfur dioxide emissions 19.48 million tons	7
2001	6	5	Domestic sewage 22.8 billion tons Industrial wastewater discharge 20.1 billion tons Sulfur dioxide emissions 19.48 million tons	8
2002	6	5	Domestic sewage 23.2 billion tons Industrial wastewater discharge 20.7 billion tons Sulfur dioxide emissions 19.27 million tons	9
2002	9	11	Duyun slag pollution incident in Guizhou province Lead-zinc mine tailings dam collapse, pouring into Fan River	10
2002	10	8	Nanpanjiang water pollution crisis in Yunnan province	11
2003	1	1	Sanmenxia reservoir water pollution crisis	12
2003	6	5	Domestic sewage 24.8 billion tons Industrial wastewater discharge 21.2 billion tons Sulfur dioxide emissions 17.91 million tons	13
2004	1	31	Solid waste pollution in Songjiazhuang, Beijing	14
2004	2	28	Tuojiang water pollution crisis in Sichuan province	15
2004	5	6	Water pollution crisis in Chuxiong section of Longchuan river in Yunnan province	16
2004	6	5	Domestic sewage 26.1 billion tons Industrial wastewater discharge 22.1 billion tons Sulfur dioxide emissions 22.54 million tons	17

2004	8	7	Several villages along the Hong river in Henan province have high incidence of intestinal cancer.	18
2004	10	20	Drinking water crisis in Puyang, Henan province	19
2004	10	20	Qingyijiang water pollution crisis in Sichuan province	20
2005	1	3	Qijiang water pollution crisis in Chongqing	21
2005	2	1	Tuojiang water pollution with phosphorus in Sichuan province	22
2005	3	1	Drinking water crisis in Jiaying, Zhejiang province	23
2005	5	4	Water pollution in the Yellow River becomes the harm of agriculture	24
2005	6	5	Domestic sewage 28.1 billion tons Industrial wastewater discharge 24.3 billion tons Sulfur dioxide emissions 25.49 million tons	25
2005	11	15	Songhua river water pollution crisis PetroChina Jilin Petrochemical Company Biphenyl plant aniline workshop explosion occurred	26
2005	12	20	Beijing water pollution crisis with cadmium	27
2006	2	28	Baiyangdian water pollution crisis in Hebei province	28
2006	6	5	Domestic sewage 29.7 billion tons Industrial wastewater discharge 24.0 billion tons Sulfur dioxide emissions 25.89 million tons	29
2006	8	2	Niu River water pollution crisis in Jilin province	30
2006	9	2	Yueyang water pollution crisis with arsenic in Hunan province	31
2006	11	15	Sichuan Luzhou Power Plant major environmental pollution accident Diesel leak into the Yangtze River	32
2007	5	29	Taihu lake water pollution crisis in Jiangsu province	33
2007	6	5	Domestic sewage 31.0 billion tons Industrial wastewater discharge 24.7 billion tons Sulfur dioxide emissions 24.68 million tons	34
2007	6	30	Cyanobacteria outbreak in Chaohu and Dianchi lakes in Jiangsu province	35
2007	7	2	Shuyang water pollution crisis in Jiangsu province	36
2008	3	2	Baishui village water pollution crisis in Guangzhou	37
2008	6	1	Yangzong water pollution crisis with arsenic in Yunnan province	38

			Domestic sewage 33.0 billion tons Industrial wastewater discharge 24.2 billion tons Sulfur dioxide emissions 23.21 million tons	39
2008	6	5		
2009	2	20	Yancheng water pollution crisis in Jiangsu province	40
2009	4	1	Yinan water pollution crisis with arsenic in Shandong province	41
			Domestic sewage 35.5 billion tons Industrial wastewater discharge 23.5 billion tons Sulfur dioxide emissions 22.14 million tons	42
2009	6	5		
2009	8	29	Collapse of Hanzhong Tailings Reservoir in Shaanxi Province	43
2009	7	29	Liuyang water pollution crisis with cadmium in Hunan province	44
2009	8	30	Child blood lead exceeded event due to drinking water pollution crisis in Shaanxi province	45
2009	9	20	Drinking water emergence due to water pollution crisis in nonferrous metal village in Hunan province	46
			Domestic sewage 38.0 billion tons Industrial wastewater discharge 23.8 billion tons Sulfur dioxide emissions 21.85 million tons	47
2010	6	5		
2010	7	3	Zijin Mining copper acid water leakage accident in Fujian province	48
2010	7	16	Crude oil leakage incident in Dalian Newport	49
2010	7	28	Chemical barrel event in Songhua River in Heilongjiang province	50
2010	10	25	Chromium waste pollution in Henan province	51
2011	6	4	Oil leakage incident in Penglai oil field of Bohai Sea	52
			Domestic sewage 42.8 billion tons Industrial wastewater discharge 23.1 billion tons Sulfur dioxide emissions 22.18 million tons Industrial nitrogen oxides 17.3 million tons Dust emissions 12.78 million tons	53
2011	6	5		
2011	6	5	Drinking water pollution crisis in Hangzhou, zhejiang province	54
2011	7	28	Solid waste pollution in Yizheng, Jiangsu province	55
2011	8	26	Qujing chromium slag pollution incident in Yunan province	56
2011	10	23	Huixian people blood cadmium exceeded event in Gansu province	57
2011	12	25	Jiangxi water pollution crisis with copper discharge	58

2012	1	1	Haze covered the North China Plain, making traffic difficult. According to press reports, Beijing Airport canceled 43 flights in the morning, delayed 80 times, visibility down to 200 meters. Low visibility is reported throughout the plain provinces.	59
2012	1	15	Longjiang water pollution crisis with cadmium in Jiangxi province	60
2012	2	3	Zhenjiang water pollution crisis in Jiangsu province	61
2012	6	5	Ministry of Environmental Protection issued 2012 China Environmental Status Bulletin. The bulletin shows that air quality is not up to standard (the most stringent environmental standards are activated, and if the old air standards are still used, the prevailing cities are up to standard.) Domestic sewage 46.3 billion tons Industrial wastewater discharge 22.2 billion tons Sulfur dioxide emissions 21.17 million tons Industrial nitrogen oxides 23.37 million tons Dust emissions 12.34 million tons	62
2013	3	12	Songjiang water pollution crisis in Shanghai	63
2013	3	18	Wastewater irrigated wheat field in Henan province	64
2013	6	5	Ministry of Environmental Protection issued 2013 China Environmental Bulletin. The communique shows that in 2013, only 74 cities in Haikou, Zhoushan and Lhasa three cities air quality standards, accounting for 4.1%; exceeded the proportion of 95.9% city. Domestic sewage 48.5 billion tons Industrial wastewater discharge 21.0 billion tons Sulfur dioxide emissions 20.44 million tons Industrial nitrogen oxides 22.27 million tons Dust emissions 12.78 million tons	65
2013	6	20	Water pollution crisis in Changqing oilfield of PetroChina	66
2013	11	22	Water pollution crisis due to Qingdao oil pipeline explosion	67
2013	12	26	Beijing haze weather In December 2013, China suffered a serious air pollution. The heavy haze belt extends from Beijing to Shanghai, about 1200 km away, and the polluted air is gray. Although China's northeast region often faces extreme haze outbreak, but spread to the south is not common.	68
2014	4	15	Drinking water pollution crisis in Lanzhou	69

2014	4	26	The concentration of ammonia nitrogen in the section of Wuhan section of Hanjiang River in Hubei Province exceeded the standard	70
2014	6	5	<p>Ministry of Environmental Protection issued 2014 China's environmental status bulletin.</p> <p>The survey shows that in 2014, 161 cities in a total of 16 cities air quality standards (better than the national secondary standards), accounting for 9.9%; 145 city air quality exceeded, accounting for 90.1%.</p> <p>Domestic sewage 51.0 billion tons</p> <p>Industrial wastewater discharge 20.5 billion tons</p> <p>Sulfur dioxide emissions 19.74 million tons</p> <p>Industrial nitrogen oxides 20.78 million tons</p> <p>Dust emissions 17.40 million tons</p>	71
2014	12	26	Thick haze covered the North China Plain, haze almost cover up the region's visible objects, including China's largest city of Beijing.	72
2015	4	27	Water pollution crisis due to manganese discharge in Yichang, Hubei province	73
2015	6	5	<p>Ministry of Environmental Protection issued 2015 China's environmental status bulletin.</p> <p>The commune shows that in 2015, the national 338 prefecture level cities carry out the new standard of air quality monitoring. The results show that there are 73 cities in the ambient air quality standards, accounting for 21.6%; 265 urban environmental air quality exceeded, accounting for 78.4%.</p> <p>Domestic sewage 53.5 billion tons</p> <p>Industrial wastewater discharge 20.0 billion tons</p> <p>Sulfur dioxide emissions 18.59 million tons</p> <p>Industrial nitrogen oxides 18.51 million tons</p> <p>Dust emissions 15.38 million tons</p>	74
2015	6	15	Liangjianf water pollution crisis in Guangdong province	75
2015	6	17	Large blue algae gathering in Chaohu lake, Anhui province	76
2015	6	30	Guangyuan reservoir water pollution crisis in Sichuan province	77
2015	11	24	Antimony leakage event in Gansu province	78
2015	12	26	North China is covered by thick haze. Haze from Beijing to the southwest extension of hundreds of kilometers, to the vicinity of Shaanxi Guanzhong plain low-lying areas. Beijing issued the first "red warning" for air pollution, the school closed, the car limit, and some factories stopped operating.	79

2016	6	5	Environmental Protection Department issued 2016 China Environmental Bulletin. According to the communique, in 2016, 848 cities in the country and above the city, the ambient air quality standards, accounting for 24.9% of the total number of cities; 254 urban environmental air quality exceeded, accounting for 75.1%.	80
2016	12	26	In December 6, 2016, the eastern part of China issued an orange alarm, heavy haze covered a large area, the Beijing airport passengers had to slow down the pace.	81

Table S2: Politics events

Event time (year-month-date)			Preorder event no.	Event description	Event no.	Actors involved
1972	6	5		<p>Chinese Delegation Participated the first UN Human Environment Conference</p> <p>Under the impetus of Zhou Enlai, China sent a delegation to participate the first UN Human Environment Conference and thus made it to be a turning point for China's environment protection. The reason that Zhou Enlai promoted China to participate the first UN Human Environment Conference is: at the beginning of the founding of new China, most of the environment issues were of local problems and there were almost no environment appeals nationwide. During the period of the first five-year plan, some industrial enterprises which discharged pollutants actually adopted some measures to treat polluted water and to control smoke and dust. These measures have reduced pollution to some extent, but in general the environment pollution and ecological damage in the period of the first five-year plan tended to be worse gradually. Especially during the period of great leap forward, people all over the country were put into a movement to produce iron and steel, and the industrial wastes – waste water, gas and slags were discharged arbitrarily which led local pollution to be worse rapidly. The large-scale construction of heavy industrial enterprises discharged a great number of harmful matters which were not well diffused and diluted but formed serious water pollution and air pollution. In the city construction field, the ideology of “production comes first and living comes later” also played negative influence to the environment protection.</p>	1	

1973	8	5	1	The 1st National Environment Protection Conference The conference reviewed and endorsed the environment protection policy of “overall planning, rational distribution, comprehensive utilization, turning disadvantage into advantage, depending on the masses, everybody participating, protecting environment, bringing benefit to the people” and the first environment protection document, Some Regulations to Protect and Improve the Environment. The conference promoted the work of environment protection and took a key step for the course of China’s environment protection. After the first environment protection conference, environment protection organizations were established all over the country, from the central government to local authorities at different levels and different regulations and systems were formulated to enhance the environment protection. Some industrial enterprises, cities and rivers were treated primarily and the environment science research and environment education were greatly developed. Regulations and policies which were established after the first environment protection conference not only promoted the development of the then environment protection cause of China, but also gave a guideline for the later environment protection.	2	SC
1974	5	1	2	Establishment of Environmental Protection Leading Group Environmental Protection Leading Group was a taskforce established by the state council of the People’s Republic of China which was responsible for the environment protection. Its main responsibilities were as follows: to enforce laws and regulations on environment protection; to organize the formulation of environment protection standards, and technological policies; to organize the formulation of the long term and annual plan of environment protection, and to supervise and monitor the implementation of the plan.	3	EPLG
1978	12	1		The 3rd Plenary Session of the 11th CPC Central Committee This Plenary Session held in December of 1987 decided that China would execute the policy of domestic reform and opening up to outside world.	4	
1981	2	14	3, 4	Decisions by the State Council on Enhancing Environment Protection during the Stage of National Economy Transformation.	5	SC
1982	5	1	3, 5	The Environment Protection Leading Group was upgraded to Environmental Protection Administration (EPA) under the Ministry of Housing and Urban Rural Development The environmental agency was bureaucratically upgraded from a taskforce to a formal national institution. But, without the big hat of the state council, the administration worked awkwardly to call for cooperation between different commissions and ministries.	6	SC MHURD EPA

1983	12	31		The 2nd National Environment Protection Conference A "three synchronizations" policy is discussed and proposed during the conference. Environmental goals should be synchronized with production at each stage of enterprise activity (planning, construction and operation).	7	SC
1984	5	1	6, 7	EPA was bureaucratically upgraded to State Environmental Protection Administration (SEPA).	8	SEPA
1989	4	28		The 3rd National Environment Protection Conference This evaluated the environmental condition in China, summarized experience in environment protection, proposed five new approaches, so as to enhance the systematic construction and to bring environment protection to a new stage. The conference proposed to strengthen the systematic construction, to deepen the environment supervision, to fight against environment pollution and to stimulate an associated development between economy and environment.	9	SC
1994	9	25		The 4th Plenary Session of the 14th CPC Central Committee According to the different characteristics of different leadership positions, China will establish scientific assessment system and standards.	10	
1995	1	1	10	Performance Evaluation Criteria for Party and Government Leading Cadres (Trial)	11	MO
1996	7	15		The 4th National Environment Protection Conference The conference proposed that environment protection is the key for the implementation of sustainable development strategy. To protect environment is actually to protect productivity. The state council made a decision concerning some issues in strengthening environment protection. General secretary Jiang Zemin pointed out in his important speech that protection environment is actually to protect productivity. The conference generated the policy which paid equal attention to prevention and control of pollution and ecology protection, and proposed two major measures including total pollution control plan and green project plan. The whole country began to carry out large scale pollution prevention and control, ecological construction and protection projects in key cities, basins, regions and sea area. The work of environment protection thus came into a thoroughly new stage.	12	SC
1998	5	1	12	SEPA was bureaucratically upgraded to State General Environmental Protection Administration (SGEPA).	13	SEPA
2002	1	8		The 5th National Environmental Protection Conference The topical subject of this conference is to implement the 10th five-year plan of the national environmental protection which was approved by the state council.	14	SC

2002	7	9	11	Regulations on Selection and Appointment of Party Government Leading Cadres The performance results should be considered as the basis for appointing and promoting cadres in the party and government departments.	15	SC
2003	10	11		The 3rd Plenary Session of the 16th CPC Central Committee This Plenary Session put forward the ideology of human-orientation, and establish a comprehensive, coordinated and sustainable scientific concept of development.	16	HU Jintao
2004	3	10	16	National Population, Resources and Environment Conference General Secretary Hu Jintao put forward the need to study green national economic accounting methods and to incorporate resource consumption, environmental losses and environmental benefits into the economic evaluation system.	17	
2005	12	31	15, 16	Interim Provisions on the Punishment of Illegal Behavior in Environmental Protection. If there was illegal behavior of the cadres and civil servants to act as "umbrella" and to protect enterprises' environmental illegal activities, they will be strictly subjected to administrative punishment.	18	MS SEPA
2006	4	17		The 6th National Environment Protection Conference The conference discussed the following issues: 1. In time of formulating development target, do not focus only on economic growth but also focus on energy saving and environment protection. So that in this 11th five-year plan, it proposed two targets: in later five years the energy consumption per unit GDP should be reduced by about 20%, the pollutant discharge should be reduced by 10%. 2. The industrial policy, especially the access system for the infrastructure project and enterprise should be strictly implemented. Those infrastructure project and enterprise that contaminate environment and waste resource are all prohibited. 3. The special treatment and control upon environment pollution will be enhanced. It is required to carry out a planned and procedure treatment and control for the non-point pollution to waters, air and land. 4. Enforce laws strictly and protect environment in accordance with laws. This is the most critical and most difficult thing. Shut down those energy in Beijing-Tianjin-Hebei agglomeration and highly polluting enterprise by law, and investigate those enterprises and individuals who made pollution and brought great losses upon people and society by law.	19	SC
2006	7	7	15, 18	A Guide to the Comprehensive Evaluation and Evaluation of Local Party and Government Leadership and Leading Cadres Reflecting the Scientific Development View	20	MO

2007	11	27	19	The State Council forwarded energy conservation and emission reduction statistics, monitoring and assessment programs and methods. The energy-saving and emission reduction targets should be incorporated into the comprehensive economic and social development plan. The performance results should be used in the assessment of cadres.	21	SC
2008	3	10	19	SGEPA was bureaucratically upgraded to the Ministry of Environmental Protection, in order to strengthen the power and enforcement ability of the environmental agency.	22	SC
2011	10	17		The 7th National Environment Protection Conference This conference discussed the means of using environment protection to optimize the economic growth, to promote the transformation of development mode and to improve living standard.	23	SC
2013	11	9		The 3rd Plenary Session of the 18th CPC Central Committee The Plenary Session proposed to strengthen the construction of ecological civilization, to explore the preparation of natural resources, the balance sheet, the implementation of natural resources, leading cadres audit, the establishment of ecological and environmental damage responsibility for life-long system.	24	Xi Jinping
2013	11	15	24	Decision on Deepening the Reform of Several Major Issues in China The decision is to incorporate the resources consumption, environmental damage, ecological benefits and other indicators of ecological civilization construction indicators into the comprehensive evaluation of economic and social development system. The weights of these indicators will be substantially increased in cadre evaluation.	25	SC
2013	12	30	25	The Establishment of Comprehensive Deepening Reform Leading Group.	26	SC
2013	12	6	25	Ordinance on Leading Cadre Selection The ordinance aims to improve the local party and government leading bodies and leading cadre's performance appraisal work, from the system level to correct the economic growth rate of purely to assess the performance bias.	27	MO
2014	10	20		The 4th Plenary Session of the 18th CPC Central Committee The Plenary Session put forward to strengthen the construction of social integrity, improve the citizens and organizations to keep law and credit records, improve the law-abiding integrity of the praise mechanism and the act of disciplinary action against the law. Specifically, it proposed to use market-based approaches to induce enterprises voluntary environmental protection activities.	28	

Table S3: Policy events

Event time (year-month-date)			Preorder event no.	Event description	Event no.	Actors
1977	3	5		The Constitution of the People's Republic of China (revised) Adopted at the first meeting of the fifth session of the National People's Congress of the People's Republic of China. In order to promote the environment protection in our country, the rule of “the nation sticks to protect the environment and natural resource, prevent and control pollution and other public hazards” was written into the constitution of the People's Republic of China in 1978 national people’s congress. So that the work of environment protection was determined to be a national responsibility and thus laid a foundation for the legislative construction of environment protection.	1	NPC
1979	9	13	1	Environment Protection Law of the People’s Republic of China (trial) The law made the rules and regulations of environment protection of China clear from the point of view of law. Later, on the basis of the act China formulated or revised many laws and regulations on environment protection in succession. The system of “Three in the same time” and the system of collection discharge license were confirmed in law. Article 6 pointed out: in time of carrying out newly constructed, reconstructed, or expanded projects, a report on their environment impact must be formulated which should be reviewed and approved by the environment protection authority and other concerned administrative organizations before their design. Among them the facilities against pollution and other public hazardous should be designed, implemented and put into production together with the main body of the projects in the same time. Discharge of hazardous matters must be in conformity with national standards.	2	NPC

1981	5	11	2	Method of Management of Environment Protection for the Capital Construction Projects The system of “Three Synchronizations” and the system of environment impact assessment were embodied by the method and it was included into the program of the capital construction. So that in 1984 the execution rate of the system of “three in the same time” was raised up to 79%.	3	NDRC MHURD MC MEP
1982	2	5	2	Temporary Method for the Collection Discharge License It was a remark that China officially set up the system of collection discharge license.	4	SC
1982	8	23	2	Marine Environmental Protection Law of the People’s Republic of China	5	NPC
1983	10	1	5	Criteria of Disposal on Ships Pollutants (environment standards)	6	MEP GAQS
1984	5	11	2	Water Pollution Prevention and Control Law of the People's Republic of China	7	NPC
1984	9	20	2	Forest Law of the People's Republic of China	8	NPC
1985	3	1	8	Standard for the control of pollutants in agricultural mud (environment standard)	9	MEP GAQS
1985	3	1	5	Standard for the discharge of pollutants in ship building industry (environment standard)	10	MEP GAQS
1985	8	1	5	Discharge standard for oil-contained polluted water in marine petroleum development industry (environment standard)	11	MEP GAQS
1985	8	16	7	Hygienic standard for drinking water (environment standard)	12	MEP GAQS
1986	3	9	2	Law of the Mineral Resources of the People’s Republic of China	13	NPC
1987	9	5	2	Air Pollution Prevention and Control Law of the People's Republic of China	14	NPC

1988	2	1	4, 9	Control standard for pollutant in agricultural fly ash (environment standard)	15	MEP GAQS
1988	2	1	8	Control standard for rural used urban refuse (environment standard)	16	MEP GAQS
1988	3	20	4, 7	Interim measure for water pollutants discharge permit management (discharge permit) Discharge application registration system and discharge permit system	17	MEP
1988	9	1	4	Interim measure for the paid use of the pollution source treatment special fund (fee collection on pollution discharge) It was an important measure to turn the appropriation to loan for the pollution discharge fee. From that time on along with the continuous development of China's economy and the appearance of new environment issues, a series of policy were proposed and implemented on the use and management of pollution discharge fee.	18	SC
1989	12	26	2, 3, 4, 17, 18	Law of Environmental Protection of the People's Republic of China was officially issued and implemented.	19	NPC
1990	3	1	5, 7	Water quality standard for fisheries (environment protection standard)	20	MEP GAQS
1990	6	29	19	Law of Water and Soil Conservation of the People's Republic of China	21	NPC
1990	7	1	21	Standard for Safe Use of Agricultural Chemicals (environment protection standard)	22	MEP GAQS
1992	3	1	21	Control Standard for Polychlorinated biphenyls (PCBS) Waste Pollution (environment protection standard)	23	MEP GAQS
1992	7	1	5, 7	Meat Processing Industrial Water Pollutant Discharge Standards (environment protection standard)	24	MEP GAQS

1992	7	1	5, 7	Energy Reduction Effluent Standard for Iron and Steel Industry (environment protection standard)	25	MEP GAQS
1992	7	1	5, 7	Textile Dyeing and Finishing Industrial Water Pollutant Discharge Standards (environment protection standard)	26	MEP GAQS
1992	9	14	4	A notice on the carrying out pilot work for the collection of fee of industrial coal sulfur dioxide discharge (fee collection for pollutant discharge) The notice aimed at the increasingly serious harm of acid rain and it marked an important spreading and expansion of the implementation scope of fee collection for pollutant discharge.	27	MEP NDRC MF
1992	10	1	21	Standards for Irrigation Water Quality (environment protection standard)	28	MEP GAQS
1993	8	15	14, 19	A notice on the collection of the water pollutant discharge fee (charge on pollutant discharge) In consideration of some pollutant discharge units are discharging a large quantity of pollutant – although the concentration of their discharged pollution water is in or lower than the national discharge standard, but the harm on the environment is even serious than that of some over standard discharge due to their very large total quantity of discharged pollutant. In order to stimulate these units to make further efforts to control their pollution, it is decided to collect fee against their discharge of polluted water which does not exceed the limit set by the standard. This is the first time to declare the idea of control the total discharge quantity in the discharge fee collection.	29	NDRC MF
1993	12	1	5, 7	Standard for space propellant water pollutant discharge and analytical method (environment protection standard)	30	MEP GAQS
1994	10	1	7	Underground water quality criteria (environment standard)	31	MEP GAQS

1995	6	15	19	Temporary measure for environment statistics management	32	MEP
1995	8	8	7	Temporary regulation for water pollution prevention and control in Huaihe River basin	33	SC
1995	10	30	21	Prevention and control law against solid waste pollution of the people's Republic of China	34	NPC
1996	3	1	21	Quality criteria for soil environment (environment standard)	35	MEP GAQS
1996	7	1	5, 7	Caustic soda and polyvinyl chloride (PVC) industrial water pollutant discharge standard (environment standard)	36	MEP GAQS
1996	10	29	19	Environmental Noise Pollution Prevention and Control Law of the People's Republic of China	37	NPC
1997	6	10		An implementation draft for the total amount control of main pollutants discharge in the whole country during the period of the 9 th five-year plan (total amount control)	38	MEP NDRC MC MF
1997	11	1	19	The energy conservation law of the People's Republic of China	39	MF SAT
1998	1	1	5, 7	Integrated waste water discharge standard (environment standard)	40	MEP GAQS
1998	7	1	5	Sea water quality standard (environment standard)	41	MEP GAQS

1998	11	18	3, 19	<p>Environment protection management regulations for construction project (environment impact assessment)</p> <p>The legislation qualification of the system of environment impact assessment was further raised up and, in the meantime, many improvements and revilements were made upon the range of application, assessment opportunity, procedure of examination and approval and lawful responsibility of environment impact assessment.</p>	42	SC
2000	4	29	14, 19	Air Pollution Prevention and Control Law of the People's Republic of China (revised)	43	NPC
2001	8	31	19	Law on the prevention and control of desertification of the People's Republic of China	44	NPC
2001	12	30		<p>The 10th five-year plan of national environmental protection and its appendix – a discomposed plan for the total amount control of the main pollutants discharge of the country during the period of the 10th five year plan (total amount control)</p> <p>The indexes of total amount control were discomposed and be distributed to grassroots, time schedule and concrete measures were made clear and in this way the total amount of the pollutants discharge of the whole country could be guaranteed to be reduced year after year. Key basins, regions, cities and sea areas should implement the index of the total amount control in accordance with the requirements set in their special planning (plan). And thus, the checking and ratifying of the practical total amount of the pollution discharge, the prediction to the newly added total amount of pollutant discharge, and the distribution of the allowed total amount of pollutant discharge were becoming the important content of the environment assessment and the systematic analysis.</p>	45	MEP NDRC MC MF
2002	1	1	34, 43	Hazardous waste incineration pollution control standards (environment standard)	46	MEP GAQS
2002	1	1	43	Emission standard of cooking fume (trial) (environment standard)	47	MEP GAQS
2002	1	1	43	Boiler air pollutants discharge standard (environment standard)	48	MEP GAQS

2002	1	1	5, 7	Ammonia industrial water pollutant discharge standards (environment standard)	49	MEP GAQS
2002	1	30	4, 18	Regulations on the management of collection and use of pollutant discharge fee (charge on pollutant discharge)	50	SC
2002	6	29		The cleaner production promotion law of the People's Republic of China	51	NPC
2002	7	1	43	Pollution control standard for general industrial solid waste storage and disposal site (environment standard)	52	MEP GAQS
2002	7	1	43	Pollution control standard for the storage of hazardous waste (environment standard)	53	MEP GAQS
2002	7	1	43	Hazardous waste landfill pollution control standards (environment standard)	54	MEP GAQS
2002	10	1	19	Water Law of the People's Republic of China	55	NPC
2002	10	28	19, 42	The environmental impact assessment law of the People's Republic of China (environment impact assessment) This law is formulated for the implementation of the sustainable development strategy, to prevent the harmful influence upon the environment produced from the implementation of planning and construction project, and to promote an associated development of the economy, society and the environment.	56	NPC
2003	1	1	7, 43	Livestock and poultry breeding industry pollutant discharge standards (environment standard)	57	MEP GAQS
2003	3	1	43	Indoor air quality standard (environment standard)	58	MEP GAQS

2003	5	23	52	A notice on carrying out the activity of establishing national environment friendly enterprise (environment friendly enterprise)	59	MEP
2003	6	28	19	Prevention and control law against radioactive pollution of the People's Republic of China	60	NPC
2003	7	1	5, 7, 43	Pollutant discharge standard for urban sewage treatment plant (environment standard)	61	MEP GAQS
2003	8	1	57	Technical guideline for the regional environment impact assessment in development zone (environment impact assessment)	62	MEP
2003	8	1	57	Principled technical guideline for the environment impact assessment of planning (trial use) (environment impact assessment)	63	MEP
2003	10	8	57	Method of examination for the environment impact report of special planning (environment impact assessment)	64	MEP
2004	1	1	43	Fossil-fuel power plant atmospheric pollutant emission standard (environment standard)	65	MEP GAQS
2004	4	1	5	Monosodium glutamate industry pollutant emission standard (environment standard)	66	MEP GAQS
2004	4	1	5	Citric acid industry pollutant emission standard (environment standard)	67	MEP GAQS
2004	10	21		Method of management on central financial compensation fund for forest ecology (ecology compensation)	68	MF
2004	11	25	39	Mid and long term special planning of energy saving (energy saving voluntary compliance agreement)	69	NDRC

2004	12	29	19, 34	Prevention and control law against solid waste pollution of the People's Republic of China (revised)	70	NPC
2005	1	1	43	Air pollutant emission standard for cement industry (environment)	71	MEP GAQS
2005	2	28	19, 39	Renewable energy law of the People's Republic of China	72	NPC
2005	3	7	60	A notice on doing further work for the establishment of national environment friendly enterprise (environment friendly enterprise)	73	MEP
2005	6	6	69, 72	China's terminal project of energy-consumption (voluntary compliance agreement on energy saving)	74	NDRC
2005	6	7	73	Several recommendations by the state council to promote a healthy development of coal industry	75	SC
2005	11	21	57	Recommendations to accelerate the work of evaluating the environment actions of enterprise (green credit)	76	MEP
2005	12	3		Decision by the state council on implementing the scientific outlook of development to strengthen environment protection	77	SC
2006	6	1	5, 7, 43	Water pollutants discharge standard for medical institution (environment standard)	78	MEP GAQS
2006	6	1	5, 7	Beer industry pollutants discharge standard (environment standard)	79	MEP GAQS
2006	8	5		Plan on controlling total amount of main pollutant discharge of the country (total amount control)	80	MEP NDRC

2006	10	1	7, 43, 70	Coal industry pollutant discharge standard (environment standard)	81	MEP GAQS
2006	11	6	56, 75	A notice on enhancing the overall planning of coal mine region and the work of environment impact assessment for coal mine construction project (environment impact assessment)	82	MEP
2007	1	1	5, 7	Saponin industry water pollutant discharge standard (environment standard)	83	MEP GAQS
2007	1	30	77	Method of management over the information disclosure of the listed companies (green credit) The securities regulatory commission formulated this method to match up the even higher requirement by the new company act and the security act for the information disclosure of the listed companies, and to implement the requirement of improving the operation transparency of the listed companies proposed by the notice of the state council on transferring the recommendation of the securities regulatory commission to improve the quality of listed company, and to accommodate the requirement put upon the supervision on listed companies by the new situation after the equity division reform.	84	CSRC
2007	3	23	78	Some recommendations of the general office of the state council on the establishment of social credit system (green credit)	85	SC
2007	5	23	70	A comprehensive work plan for energy conservation and emission reduction	86	SC
2007	7	25	84, 85	Management method of environment monitoring	87	MEP
2007	8	1	43	Gas station air pollution emission standard (environment standard)	88	MEP GAQS
2007	8	1	43	Air pollutant emission standard for gasoline transportation (environment standard)	89	MEP GAQS

2007	8	1	43	Air pollutant emission standard for oil storage (environment standard)	90	MEP GAQS
2007	8	24	78	A guideline recommendation on carrying ecology compensation work (ecology compensation)	91	MEP
2007	10	30	39, 69	Energy conservation law of the People's Republic of China (revised)	92	NPC
2007	12	10		Management method for national eco-industry demonstration park (eco-industry demonstration park)	93	MEP MC MST
2008	2	22	84, 87	Guideline recommendations on enhancing the supervision and control over the listed company environment protection (green security) Guide the listed companies to actively perform their social responsibility of environment protection and stimulate the listed companies to continuously improve their environment presentation, and try their best to be examples of resource conserving and environment friendly one.	94	MEP CSRC
2008	2	29	7, 77	Water pollution prevention and control law of the People's Republic of China (revised)	95	NPC
2008	7	1	70, 95	Living garbage landfill pollution control standards (environment standard)	96	MEP GAQS
2008	7	1	43	Coalbed methane (coal mine gas) emission standard (interim) (environment standard)	97	MEP GAQS
2008	7	1	96	Heterocyclic pesticides industry water pollutant discharge standard (environment standard)	98	MEP GAQS
2008	7	31	78	National Plan for Eco-Functional Areas	99	MF MEP

2008	8	1	96	Sugar industry water pollutant discharge standard (environment standard)	100	MEP GAQS
2008	8	1	96	Mixed preparation pharmacy industry water pollutant discharge standard (environment standard)	101	MEP GAQS
2008	8	1	96	Extract pharmacy industry water pollutant discharge standard (environment standard)	102	MEP GAQS
2008	8	1	96	Biological engineering pharmacy industry water pollutant discharge standard (environment standard)	103	MEP GAQS
2008	8	1	96	Traditional Chinese medicine pharmacy industry water pollutant discharge standard (environment standard)	104	MEP GAQS
2008	8	1	96	Fermentation pharmacy industry water pollutant discharge standard (environment standard)	105	MEP GAQS
2008	8	1	43, 95	Electroplating pollutant discharge standard (environment standard)	106	MEP GAQS
2008	8	1	96	Chemical synthetic pharmacy industry water pollutant discharge standard (environment standard)	107	MEP GAQS
2008	8	1	96	Synthetic leather and artificial leather industry water pollutant discharge standard (environment standard)	108	MEP GAQS
2008	8	1	96	Down feather industry water pollutant discharge standard (environment standard)	109	MEP GAQS
2008	8	1	96	Pulping and papermaking industry water pollutant discharge standard (environment standard)	110	MEP GAQS

2008	9	1		Circular economy promotion law of the People's Republic of China Article 44 of the law regulates clearly that the state gives tax preference to those industrial activities which promote the circular economy development. The state makes use of tax and other measures to encourage the import of advanced technology, equipment, and product which feature in energy saving, water saving and material saving, but limit the export of product which consumes more energy and produce pollution during manufacture.	111	NPC
2008	10	1	112	A notice on the policy of renewable resource tax (green tax)	112	MF SAT
2008	10	5	121	A notice on tax preferential contents for energy-saving and water-saving enterprises (green tax)	113	MF SAT
2008	10	16	121	A notice on adjusting the resource tax for diatomaceous earth, perlite, phosphate rock and jade (green tax)	114	MF SAT
2008	12	9	121	A notice on the policy of value-added tax for comprehensive utilization and other product (green tax)	115	MF SAT
2009	3	23	121	A notice on issues of enterprise income tax policy for China's clean development mechanism (CDM) funds and enterprises which executed the clean development mechanism (CDM)project (green tax)	116	MF SAT
2009	4	10	121	A notice on issues of management on enterprise income tax preference for the enterprise which makes comprehensive utilization of resource (green tax)	117	SAT
2009	7	8	96	Method of management of time-limit treatment and control (trial use), it aims mainly on the time-limit treatment of water pollution (time-limit control)	118	MEP
2009	8	12	57	Regulations of environment impact assessment for planning (environment impact assessment)	119	SC

2009	12	7	121	A notice on the value-added tax policy for the comprehensive utilization product that makes use of agricultural and forest residues as raw material (green tax)	120	MF SAT
2009	12	22	121	A notice on reducing passenger vehicle purchase tax for vehicles with a displacement of below 1.6 liter (green tax)	121	MF SAT
2009	12	31	121	A notice on publishing the enterprise income tax preference content (trial use) for environment protection energy and water conserving project (green tax)	122	MF SAT
2010	5	6	121	A notice on carrying out further work which makes use of tax to stimulate energy conservation and emission reduction (green tax)	123	SAT
2010	5	11	121	A notice on the adjusting the tax rate standard of the resource tax for refractory clay and fluorite (green tax)	124	MF SAT
2010	6	2	121	A notice on concerned issues in offsetting enterprise income tax by means of investment in special equipment for environment protection energy and water conservation safety production (green tax)	125	SAT
2010	10	1	43, 95	Ceramic industry pollutant discharge standard (environment standard)	126	MEP GAQS
2010	10	1	43, 95	Magnesium, titanium industry pollutant discharge standard (environment standard)	127	MEP GAQS
2010	10	1	43, 95	Copper, nickel, cobalt industry pollutant discharge standard (environment standard)	128	MEP GAQS
2010	10	1	43, 95	Lead, zinc industry pollutant discharge standard (environment standard)	129	MEP GAQS
2010	10	1	43, 95	Aluminum industry pollutant discharge standard (environment standard)	130	MEP GAQS

2010	10	1	43, 95	Printing ink industry water pollutant discharge standard (environment standard)	131	MEP GAQS
2010	10	1	43, 95	Yeast industry water pollutant discharge standard (environment standard)	132	MEP GAQS
2010	10	1	43, 95	Starch industry water pollutant discharge standard (environment standard)	133	MEP GAQS
2010	11	18	121	A notice on adjusting part of the policy of the imported oil consumption tax (green tax)	134	MF SAT
2010	12	22	121	A notice on the consumption tax exemption from conscription for the production of pure biodiesel from wasted animal and vegetable oil (green tax)	135	MF SAT
2011	1	6		Plan of national total amount control of main pollutant discharge in the period of the 12th five-year plan (total amount control)	136	MEP NDRC
2011	6	30	95, 99	Measures of management for pilot of the protection of lake ecological environment protection	137	MF MEP
2011	7	19	100	Payment methods for the transfer of state key ecological function zones (environment regionalization)	138	MF
2011	10	1	43, 95	Aluminum industry pollutant discharge standard (environment standard)	139	MEP GAQS
2011	10	1	43, 95	Magnesium, titanium industry pollutant discharge standard (environment standard)	140	MEP GAQS
2011	10	1	43, 95	Copper, nickel, cobalt industry pollutant discharge standard (environment standard)	141	MEP GAQS

2011	10	1	43, 95	Lead, zinc industry pollutant discharge standard (environment standard)	142	MEP GAQS
2011	10	1	43	Sheet glass industry pollutant discharge standard (environment standard)	143	MEP GAQS
2011	10	1	43, 95	Vanadium industry pollutant discharge standard (environment standard)	144	MEP GAQS
2011	10	1	43, 95	Vanadium industry pollutant discharge standard (environment standard)	145	MEP GAQS
2011	10	1	43, 95	Ceramic industry pollutant discharge standard (environment standard)	146	MEP GAQS
2011	10	1	43, 95	Phosphorous fertilizer industry water pollutant discharge standard (environment standard)	147	MEP GAQS
2011	10	1	43, 95	Rare earth industry pollutant discharge standard (environment standard)	148	MEP GAQS
2011	10	28	111, 120	Provisional regulations, implementing rules of the resource tax of the People's Republic of China	149	MF SAT
2011	10	30	139	A notice on enhancing the adjustment and control over power generation coal price (green price)	150	NDRC
2011	11	29	111, 120	Interim measures for the collection and use of renewable energy development funds.	151	MF NDRC NEA
2011	11	30	139	A notice on the adjustment and control for the power generation coal price (green price).	152	NDRC

2011	11	30	139	Some recommendations on establishing and perfecting ecological compensation mechanism (ecology compensation).	153	NDRC
2012	1	1	43, 95	Rubber product industry pollutant discharge standard (environment standard)	154	MEP GAQS
2012	1	1	43, 95	Alcohol and liquor fermentation industry pollutant discharge standard (environment standard)	155	MEP GAQS
2012	1	1	43, 95	Vehicle repair industry water pollutant discharge standard (environment standard)	156	MEP GAQS
2012	1	1	43, 95	Ammunition charge industry pollutant discharge standard (environment standard)	157	MEP GAQS
2012	1	6	150	A notice on the business tax policy for transferring natural resource permit (green tax)	158	MF SAT
2012	3	6	150	A notice on the policy of vehicle and vessel tax for energy conservation by making use of new energy vehicle and vessel (green tax)	159	MF SAT
2012	6	26	157	A notice on some issues of exemption from vehicle purchase tax for urban public transportation enterprise's purchase of vehicle (green tax)	160	SAT
2012	10	1	43	Iron alloy industry pollutant discharge standard (environment standard)	161	MEP GAQS
2012	10	1	43	Steel industry pollutant discharge standard (environment standard)	162	MEP GAQS
2012	10	1	43, 95	Iron alloy industry pollutant discharge standard (environment standard)	163	MEP GAQS

2012	10	1	43	Rubber product industry pollutant discharge standard (environment standard)	164	MEP GAQS
2012	10	1	43	Iron industry pollutant discharge standard (environment standard)	165	MEP GAQS
2012	10	1	43, 95	Coke industry pollutant discharge standard (environment standard)	166	MEP GAQS
2012	10	1	96	Iron and steel sintering, pellet industry pollutant discharge standard (environment standard)	167	MEP GAQS
2012	10	1	96	Steel rolling industry pollutant discharge standard (environment standard)	168	MEP GAQS
2012	10	1	96	Iron ores mining & dressing industry pollutant discharge standard (environment standard)	169	MEP GAQS
2013	2	1	150	A notice on perfecting the tax refund policy on consumption tax of ethylene, Aromatic hydrocarbon chemical products produced from naphtha, fuel oil (green tax)	170	MF SAT
2013	7	1	43	Electronic glass industry air pollutant emission standard (environment standard)	171	MEP GAQS
2013	7	4	151	A notice on further standardizing the collection management of mining resource compensation fee	172	MLR
2013	7	30	88	Pollution source supervision monitoring and information publication method for enterprises under the supervision of the state (trial use) (green credit)	173	MEP
2013	9	10	43	An action plan for the prevention and control of air pollution	174	SC

2013	9	23	150	A notice on value-added tax policy for photovoltaic power generation (green tax)	175	MF SAT
2013	12	12	150	A notice on the exemption of consumption tax for regenerated oil from wasted fossil oil (green tax)	176	MF SAT
2013	12	12	150	A notice on taking the railway transportation industry and post industry into the pilot work of replacing business tax with value-added tax (green tax)	177	MF SAT
2013	12	18		Evaluation method for enterprise's environment credit (trial use) (green credit)	178	MEP NDRC PBC CBRC
2014	1	1	43	Brick-tile industry air pollutant emission standard (environment standard)	179	MEP GAQS
2014	3	1	34, 43	Standard for cement kiln to collaboratively treating pollution from solid waste (environment standard)	180	MEP GAQS
2014	3	1	96	Leather and fur processing industry water pollutant discharge standard (environment standard)	181	MEP GAQS
2014	3	1	43	Cement industry air pollutant emission standard (environment standard)	182	MEP GAQS
2014	3	1	43, 95	Battery industry pollutant discharge standard (environment standard)	183	MEP GAQS
2014	3	26	128	A notice on further enhancing the work of environment impact assessment in water conservancy planning (environment impact assessment)	184	MEP
2014	4	24	19, 178	Environment protection act of the people's Republic of China (revised)	185	NPC

2014	5	15	186	Action plan of 2014 – 2015 energy conservation and emission reduction low-carbon development (total amount control)	186	SC
2014	7	1	43, 95	Tin, antimony, mercury industry pollutant discharge standard (environment standard)	187	MEP GAQS
2014	7	1	43	Boiler air pollutant emission standard (environment standard)	188	MEP GAQS
2014	8	1	157	An announcement on exemption of purchase tax for new energy vehicle (green tax)	189	MIIT
2014	9	12	187	Action plan (2014 – 2020) for the upgrading and reform of energy conserving and emission reduction in coal fired power generation (total amount control)	190	NDRC MEP NEA
2014	9	22	186	Guideline recommendations of the ministry of commerce on making great efforts in development of green circulation, to construct green supply chain. (green purchase)	191	MC
2014	10	9	120, 190	A notice on the implementation of coal resource tax reform (green tax)	192	MF SAT
2014	10	9	193	A notice on concerned policy of the adjustment of crude oil and natural gas resource tax (green tax)	193	MF SAT
2014	11	19	179	A notice on the reform and adjustment over the environment protection verification system for listed companies (green securities) Change the system of environment verification for listed companies to daily and non-periodic inspection.	194	MEP
2014	11	28	194	A notice on increasing consumption tax for refined oil product (green tax)	195	MF SAT

2014	12	12	196	A notice on further increasing consumption tax for refined oil product (green tax)	196	MF SAT
2014	12	22	179	A guideline of green purchase for enterprise (trial use) (green purchase)	197	MC MEP MIIT
2015	4	25	186	Recommendations of the state council on speeding up the promotion of ecological civilization construction	198	SC
2015	7	1	43, 95	Petroleum refinery industry pollutant discharge standard (environment standard)	199	MEP GAQS
2015	7	1	43, 95	Secondary copper, aluminum, lead, zinc industry pollutant discharge standard (environment standard)	200	MEP GAQS
2015	7	1	43, 95	Synthetic resin industry pollutant discharge standard (environment standard)	201	MEP GAQS
2015	7	1	43, 95	Inorganic chemical industry pollutant discharge standard (environment standard)	202	MEP GAQS
2015	7	1	43, 95	Petrochemical industry pollutant discharge standard (environment standard)	203	MEP GAQS
2015	7	1	43	Crematorium atmospheric pollutant emission standard (environment standard)	204	MEP GAQS
2015	7	1	43, 95	Petroleum refinery industry pollutant discharge standard (environment standard)	205	MEP GAQS
2015	7	1	43, 95	Petrochemical industry pollutant discharge standard (environment standard)	206	MEP GAQS

2015	7	23		Interim method for management for income from pollution discharge right transfer (emission trading)	207	MF NDRC MEP
2015	8	29	43, 185	Air pollution control law of People's Republic of China (revised)	208	NPC
2015	9	21	199	Overall plan of ecological civilization system reform	209	SC
2015	12	10	179	<p>Guideline recommendations on enhancing enterprise's environmental credit system construction (green credit)</p> <p>Party central committee and the state council pay great importance on social credit system construction. The 18th national congress of CPC proposed "strengthen construction of government credit, business credit, social credit and judicial public faith" The third plenary session of the 18th CPC central committee proposed "establish and perfect social credit system, praise good faith, punish break letter". The fourth plenary session of the 18th CPC central committee proposed "strengthen social credit construction, perfect the law-abiding credit record of citizen and organization, improve the praise mechanism for law-abiding credit and the punish mechanism for law-breach and faith breaking"</p> <p>The credit construction in field of environment protection is an important part of the social credit system construction. The newly revised environment protection law specifies that the information of environmental law breach of enterprise and institution, and other production operator should be recorded into the social credit archive and the name of the law breaker should be published to the society. The 2014 – 2020 social credit system construction outline issued by the state council proposed clear requirement upon the credit construction in field of environment protection. The notice on enhancing environment supervision law enforcement issued by the general office of the state council proposed: "establish environment credit evaluation system, list the environment law-broken enterprise into a 'blacklist' and make it publicly to the society, record their environment pollution behavior into social credit system.</p>	210	MEP NDRC

2015	12	17	93, 208	National eco-industry demonstration park management measure (revised) (eco-industry demonstration park)	211	MEP MC MST
2015	12	24	211	National eco-industry demonstration park management measure (revised) (eco-industry demonstration park)	212	MEP
2016	1	4	209	Guideline recommendations on carrying out consultation for environment impact assessment in planning (trial use) (environment impact assessment)	213	MEP
2016	1	4	209	Recommendations on enhancing joint operation between environment impact assessment in planning and environment impact assessment of construction project (environment impact assessment)	214	MEP
2016	2	24	209	Guideline recommendations on enhancing space control, total amount control and environment admittance in environment impact assessment for planning (trial use) (environment impact assessment)	215	MEP
2016	4	27	187	Method of management over energy conservation in industry (energy conserving voluntary compliance agreement)	216	NDRC
2016	4	28	209	Recommendations of the general office of the state council on perfecting ecology protection compensation mechanism (ecological compensation)	217	SC
2016	5	9	216	A notice on promoting overall resource tax reform (green tax)	218	MF SAT
2016	5	9	218	Temporary method for water resource reform pilot (green tax)	219	MF SAT
2016	6	1	211	A notice on carrying out clear and simple management pilot work for environment impact assessment in industrial park planning (environment impact assessment)	220	MEP

2016	7	2	92, 217	Energy conservation law of the people's Republic of China (revised)	221	NPC
2016	7	2	56, 212, 213, 214	Environment impact assessment law of the People's Republic of China (revised) (environment impact assessment)	222	NPC

Table S4: Actor names

Actor Label	Actor Name and Responsibility
MEP	<p>Ministry of Environmental Protection</p> <ul style="list-style-type: none"> • <i>First step (1974): Environmental Protection Leading Group of the State Council</i>, which was established in 1974 in respond to the event of China participating in the first United Nations Human Environment Conference, and was the first actor that solely aimed at environmental protection in China. Despite no administrative authority, the Leading Group was formed to coordinate environmental protection issues across different ministries on behalf of the State Council. • <i>Second step (1982 Program): Environmental Protection Administration (EPA)</i>, which was evolved from the Leading Group, separated from the State Council and became a branching authority within the Ministry of Housing and Urban Rural Development (MHURD). Although it had some authority to issue regulations and guidance, the EPA's coordination work went awkwardly because of its limited capacity to act independently from the State Council. • <i>Third step (1984 Program): State Environmental Protection Administration (SEPA)</i>, which was evolved from EPA, and given more authority to issue regulations but still under the administration of MHURD. • <i>Fourth step (1987 Program): SEPA</i>, which was separated from MHURD and allocated with independent power to issue and enforce environmental policies. • <i>Fifth step (1988 Program): SEPA</i>, which was raised from an administration under MHURD to an agency directly under the State Council. • <i>Sixth step (1998 Program): State General Environmental Protection Administration (SGEPA)</i>, which was evolved from SEPA by renaming and allocating more authority in managing environmental protection bureau at provincial and municipal levels.

	<ul style="list-style-type: none"> • <i>Seventh step (2008 Program): Ministry of Environmental Protection (MEP)</i>, which was raised from SGEPA and allocated more discursive and enforcement power to protect the environment. Since then, the environmental protection authority has the equal authoritative power and administrative rank as other ministries in China.
NPG	<p>National People's Congress</p> <ul style="list-style-type: none"> • the national legislature in China, stands as the most important actor that has the power to amend the Constitution and enact environmental laws.
SC	<p>State Council</p> <ul style="list-style-type: none"> • the top authority that formulates macro-level national development plans and environmental regulations and guidance.
NDRC	<p>National Development and Reform Commission</p> <ul style="list-style-type: none"> • takes the responsibility of setting the right price for industries operation, and reconciling goals of economic development and environmental protection.
MHURD	<p>Ministry of Housing and Urban-Rural Development</p> <ul style="list-style-type: none"> • is in charge of environmental impact assessment for construction projects.
MC	<p>Ministry of Commerce</p> <ul style="list-style-type: none"> • encourage industries to innovate and apply environmental protection technologies, adopt cleaner production processes and promote green supply chain development.
MIIT	<p>Ministry of Industry and Information Technology</p> <ul style="list-style-type: none"> • encourage industries to innovate and apply environmental protection technologies, adopt cleaner production processes and promote green supply chain development.
MST	<p>Ministry of Science and Technology</p> <ul style="list-style-type: none"> • encourage industries to innovate and apply environmental protection technologies, adopt cleaner production processes and promote green supply chain development.
MLR	<p>Ministry of Land and Resources</p>

	<ul style="list-style-type: none"> • responsible for resource protection and ecological compensation.
NEA	National Energy Administration <ul style="list-style-type: none"> • responsible for resource protection and ecological compensation.
MT	Ministry of Transport <ul style="list-style-type: none"> • in charge of reducing environmental pollution sourced from transportation and promoting new energy vehicles.
GAQS	General Administration of Quality Supervision <ul style="list-style-type: none"> • give support to the MEP for the formulation of environmental quality standards.
MF	Ministry of Finance <ul style="list-style-type: none"> • provide tax incentives to enterprises to adopt environmental friendly products and processes.
SAT	State Administration of Taxation <ul style="list-style-type: none"> • provide tax incentives to enterprises to adopt environmental friendly products and processes.
MS	Ministry of Supervision <ul style="list-style-type: none"> • holds public officials accountable for environmental enforcement and sanction.
MO	Ministry of Organization <ul style="list-style-type: none"> • Appoint cadres on certain administrative positions, propose promotion opportunities for cadres.
PBC	People's Bank of China <ul style="list-style-type: none"> • provide financial incentives to enterprises, including green credit, green securities and environmental liability insurance.
CBRC	China Banking Regulatory Commission <ul style="list-style-type: none"> • provide financial incentives to enterprises, including green credit, green securities and environmental liability insurance.

CSRC	China's Securities Regulatory Commission <ul style="list-style-type: none"> • provide financial incentives to enterprises, including green credit, green securities and environmental liability insurance.
CIRC	China's Insurance Regulatory Commission <ul style="list-style-type: none"> • provide financial incentives to enterprises, including green credit, green securities and environmental liability insurance.