

Wastewater Legislation & Its Practices In China

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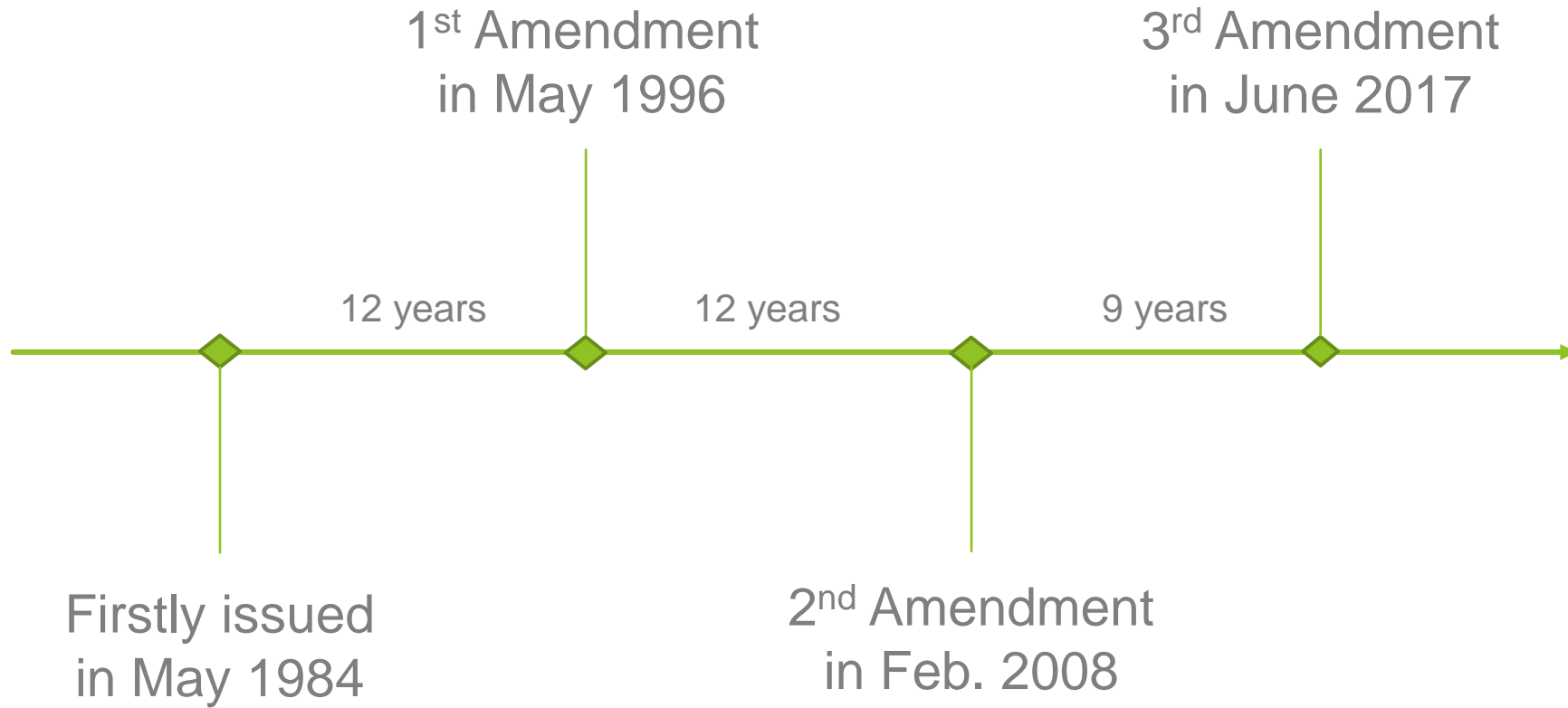
VESP | VeCity Environmental Solutions Platform

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I. Water Pollution Prevention & Control Law (WPPCL)



I. Water Pollution Prevention & Control Law (WPPCL)

Key background to the 3rd Amendment:

- Many significant conflicts existed between WPPCL and **the Environmental Protection Law (EPL)**, which was amended and came into force in Jan. 2015 acting as the basic law in regards to ecological and environmental affairs.
- Series of innovative and effective systems and measures, as stated in and practiced according to the **National Water Pollution Prevention & Control Action Plan (NWPPCAP)** starting from April 2015, needed to be legally escalated and finalized in terms of law.
- Following further industrialization process in past 10 years, challenging situation of water pollution was not substantially relieved and water quality had even shown possibilities and trends for further degradation.

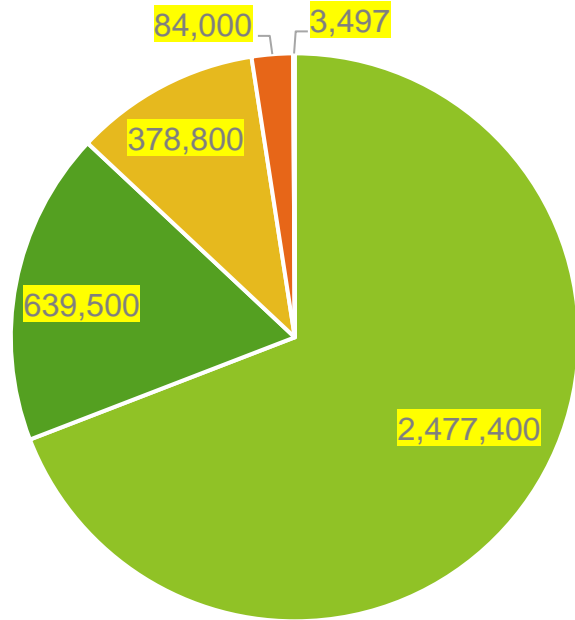
I. Water Pollution Prevention & Control Law (WPPCL)

Some highlights in the 3rd Amendment:

- Make national and local Standards both for Water Quality and Water Pollutants Discharge.
- Governments at all levels are responsible for water quality in its administrative regions, integrating water protection into its **National Economic and Social Development Plan (NESDP)**.
- Set up **River & Lake Chief Management System (RLCMS)** at province, city, county and town levels.
- Implement monitoring, evaluation and alerting on Carrying Capacity of River Basin Environmental Resources (CCRBER).
- Promote and strengthen **Centralized Treatment Facilities (CTF)** for wastewater coming from industries, cities, towns and villages.
- Establish the **Pollutants Discharge Permit System (PDPS)**, strictly stating types, concentration, total amount and discharge direction of pollutants.

II. The 2nd National Census on Pollution Sources (NCPS)

Statistics for National Pollution Sources in Year 2017
(Mobile Sources Excluded)

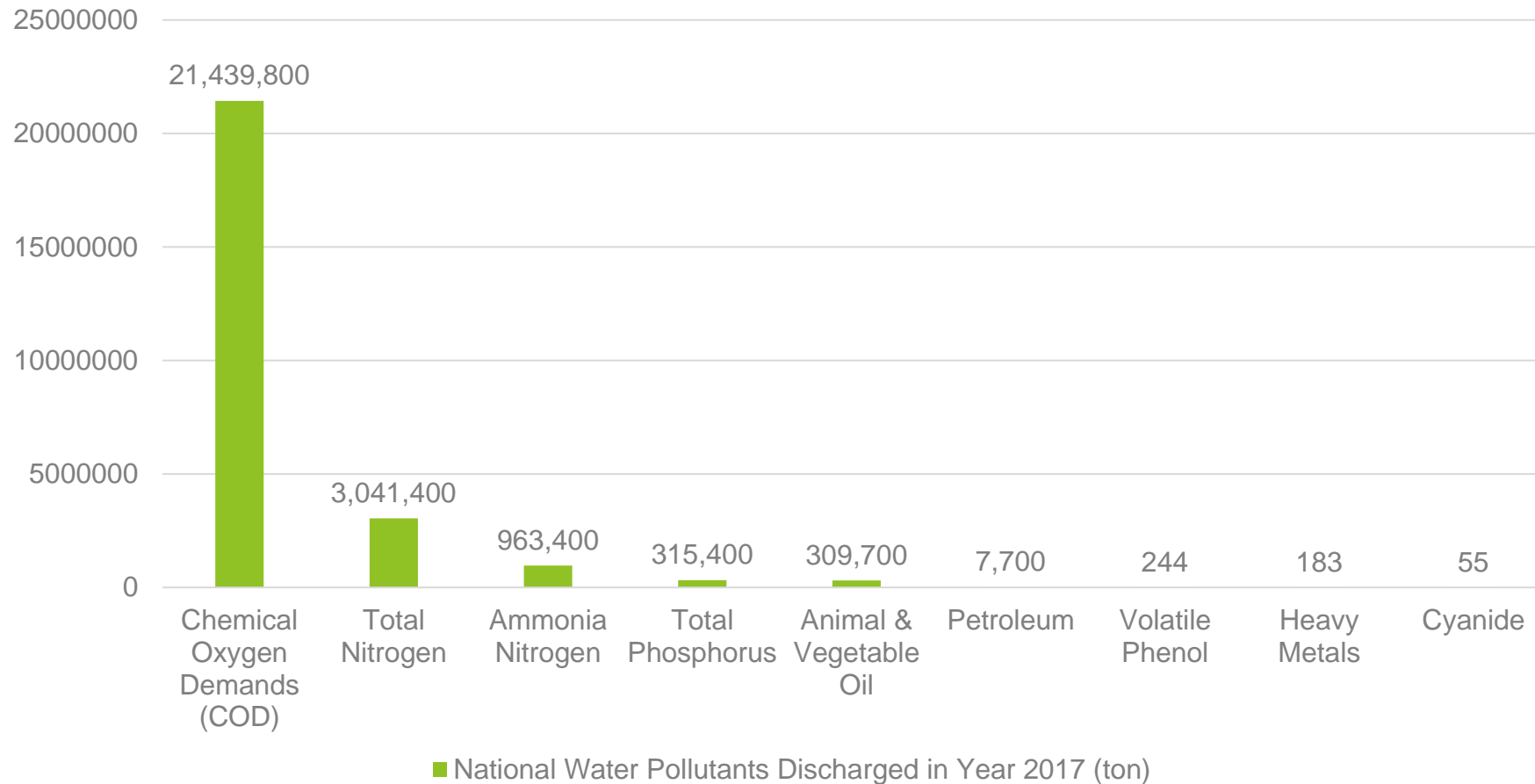


- Industrial Sources
- Domestic Sources
- Agricultural Sources
- Centralized Treatment Facilities
- Administrative Regions

- The 2nd NCPS, lasting three years and based on data of year 2017, was launched jointly by Ministry of Ecology & Environment (MEE), National Bureau of Statistics (NBS) and Ministry of Agriculture & Rural Affairs (MoA). The Communique of 2nd NCPS was released in June 2020.
- The target of NCPS is to get a clear overview about pollution status in our country and help formulate strategic economic, social development and environmental protection plan.
- Total amount of pollution sources has reached over 3.58 million, excluding mobile sources.

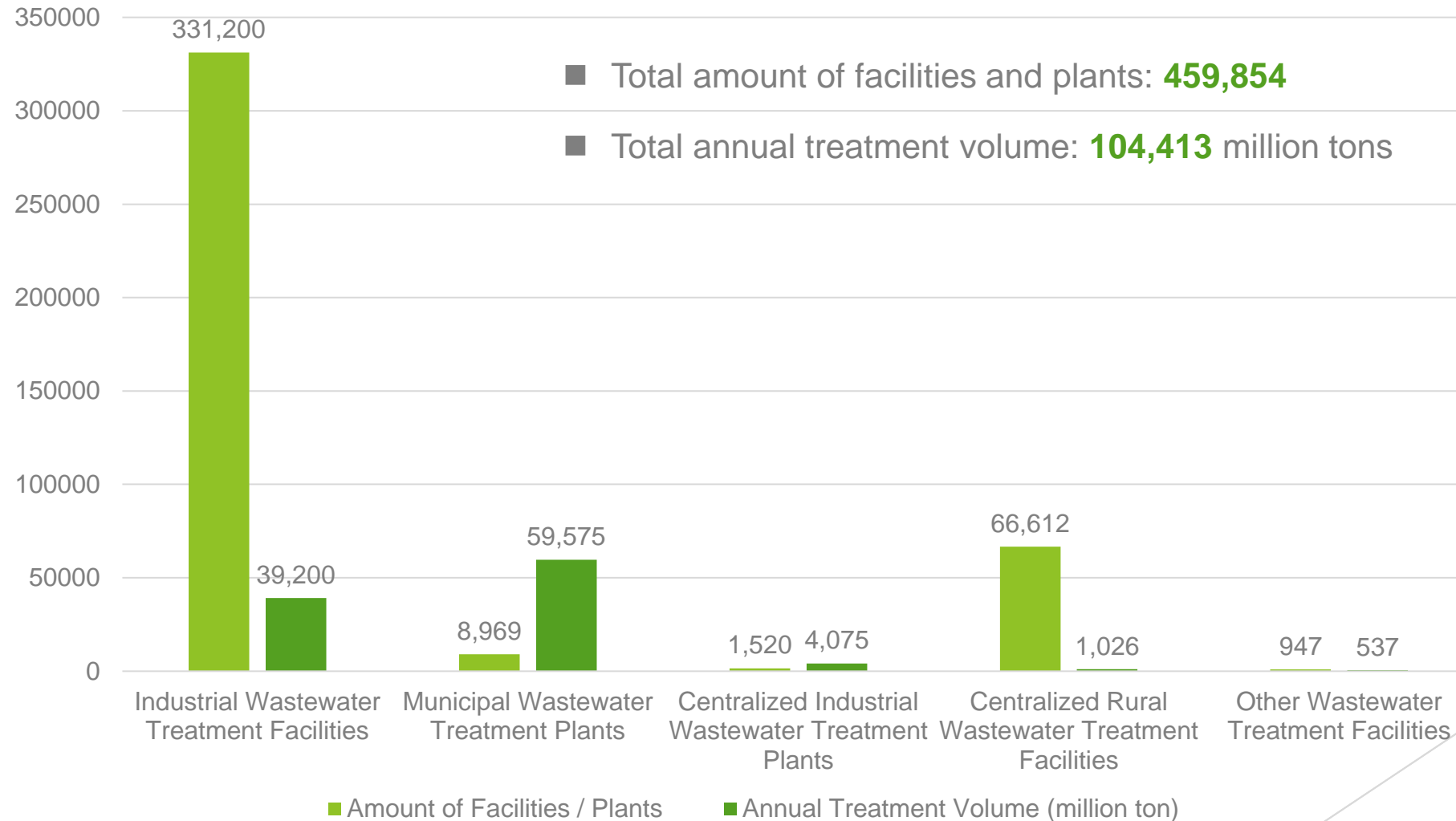
II. The 2nd National Census on Pollution Sources (NCPS)

National Water Pollutants Discharged in Year 2017 (ton)



II. The 2nd National Census on Pollution Sources (NCPS)

Wastewater Treatment Capacities in Year 2017



III. Demands for Environmental Technology Upgrade

Following further industrialization and urbanization progress in next decades, more new wastewater treatment facilities and plants will be built. Those existing around 460,000 units also need upgrade and reform in order to be more efficient and cost-effective. Both trends will create tremendous demands in this sector.

- Make wastewater treatment facilities and plants greener, safer and more cost-effective by avoiding secondary pollution, increasing O&M efficiency and adopting worldwide best practices.
- Upgrade or transform hardware and software of existing treatment facilities via adopting new environmental technologies, products and equipments.
- Provide comprehensive solutions to graywater recycling based on concepts of circular economy. Less wastewater discharge into ecosystem means more space for production expansion.

IV. Innovative Practices in Environmental Policies

- **Pollutants Discharge Rights Trading System (PDRTS)**, based on total amount control and quota allocation, will be further promoted at provincial and national level.
- **Compensation System for Ecological and Environmental Damage (CSEED)** has taken into consideration polluter's lifelong responsibilities and his individual credit evaluation.
- **Sci-Tech Innovation Board**, renowned as STAR Market, was officially set up by Shanghai Stock Exchange (SSE) in June 2019, aiming at using market-oriented IPO mechanism to advance technology investment and breakthrough. Environmental protection is listed in one of top priority sectors.
- **Foreign Experts Workstation (FEW)** programme, as encouraged by Zhejiang government in June 2020, will be regarded as an effective measure to strengthen international cooperation in technology sector.
- **National Real-time Database Platform** has been built respectively for [City Air Qualities \(CAQ\)](#) and [Online Monitoring of Surface Water Qualities \(SWQ\)](#), which is completely open the public via **MEE** website.

IV. Innovative Practices in Environmental Policies



National Real-time Database Platform for City Air Qualities

IV. Innovative Practices in Environmental Policies

国家地表水水质自动监测实时数据发布系统

城市: 流域: 断面名称搜索: 搜索

省份 Province	流域 River Basin	断面名称 Section Name	监测时间 Time	水质类别 Quality Level	水温 (°C)	pH (无量纲)	溶解氧 (mg/L)	电导率 (μS/cm)	浊度 (NTU)	高锰酸盐指数 (mg/L)	氨氮 (mg/L)	总磷 (mg/L)	总氮 (mg/L)	叶绿素 a (mg/L)	藻密度 (cells/L)	站点情况
北京市	海河流域	沿河城	09-25 12:00		20.4	8.36	9.02	1532.4	17.1	—	0.120	0.044	0.51	*	*	维护
北京市	海河流域	古北口	09-25 12:00		18.4	7.40	9.31	677.6	2.6	1.75	0.180	—	6.49	*	*	维护
天津市	海河流域	三岔口	09-25 12:00	III	23.1	7.52	5.61	722.1	15.0	2.66	0.340	0.008	1.04	*	*	正常
天津市	海河流域	果河桥	09-25 12:00	II	23.6	8.43	13.34	619.4	7.3	2.69	0.160	0.038	7.04	*	*	正常
河北省	海河流域	岗南水库	09-25 12:00	II	25.8	8.29	7.57	563.1	1.4	2.38	0.060	0.010	2.84	*	*	正常
河北省	海河流域	八号桥	09-25 12:00	III	19.1	7.65	8.47	1063.2	58.5	5.17	0.210	0.162	5.10	*	*	正常
山西省	黄河流域	河津大桥	09-25 12:00	IV	23.4	7.91	9.38	1831.2	114.4	6.40	0.050	*	*	*	*	正常
山西省	黄河流域	万家寨水库	09-25 12:00	III	18.5	7.92	8.52	741.4	211.8	5.14	0.310	0.123	2.79	*	*	正常
内蒙古自治区	黄河流域	画匠营子	09-25 12:00	II	18.9	7.80	7.72	775.1	1322.6	3.91	0.026	*	*	*	*	正常
内蒙古自治区	黄河流域	海勃湾	09-25 12:00	II	18.5	7.68	6.50	671.7	81.4	1.87	0.150	*	*	*	*	正常
内蒙古自治区	松花江流域	黑山头			—	—	—	—	—	—	—	—	—	*	*	停站
辽宁省	辽河流域	大伙房水库	09-25 12:00		20.9	7.20	8.66	293.7	8.5	4.36	0.200	—	2.21	—	*	维护
辽宁省	辽河流域	江桥			—	—	—	—	—	—	—	—	—	*	*	维护
辽宁省	辽河流域	辽河公园	09-25 12:00	V	21.8	6.64	5.74	8838.4	624.9	12.07	0.115	0.434	2.78	*	*	正常
辽宁省	辽河流域	汤河水库			—	—	—	—	—	—	—	—	—	*	*	停站
辽宁省	辽河流域	盘锦兴安(兴安)	09-25 08:00		20.7	7.93	6.71	270.1	1569.2	7.56	2.270	—	—	*	*	维护
辽宁省	辽河流域	珠尔山	09-25 12:00	III	19.9	7.47	11.87	452.4	138.7	4.05	0.110	0.169	4.43	*	*	正常
吉林省	松花江流域	松花江村			—	—	—	—	—	—	—	—	—	*	*	停站
吉林省	松花江流域	白沙滩			—	—	—	—	—	—	—	—	—	*	*	停站
吉林省	松花江流域	圈河			—	—	—	—	—	—	—	—	—	*	*	停站
黑龙江省	松花江流域	肇源			—	—	—	—	—	—	—	—	—	*	*	停站
黑龙江省	松花江流域	乌苏镇			—	—	—	—	—	—	—	—	—	*	*	停站
提示: 水质类别参评项为: pH、溶解氧、高锰酸盐指数、氨氮、总磷; 数据未经审核仅供参考; “—”表示数据无效, “*”表示该站点无此监测仪器。										6.91	0.126	0.125	2.45	*	*	正常

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National Real-time Database Platform for Online Monitoring of Surface Water Qualities

V. Prospection on Future China-EU Cooperation

- The **14th Five-years Ecological & Environmental Protection Plan** is under drafting at National and provincial level and will be officially released in first half year of 2021.
- China will continuously face urgent ecological and environmental issues and challenges due to its further economic development and urbanization process.
- **China-EU Comprehensive Agreement on Investment** will be hopefully to close negotiation soon, which will make Chinese market more open to EU. In post-pandemic era, establishing green, digital and resilient partnership will definitely benefit both sides in environmental sector.



VI. Who We Are as a non-profitable platform

