

**TESLA** & MORE

# Electric Vehicle Investigative Report III



 IPE  PECC

June, 2022



# TESLA & MORE

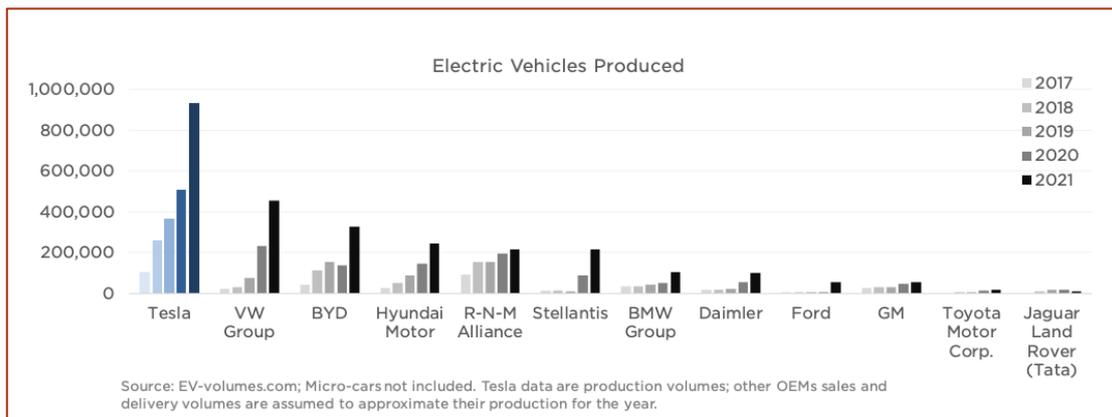
## ELECTRIC VEHICLE INVESTIGATIVE REPORT III

June 2022

### PREFACE

Recently, an electric vehicle (EV) company's exhaust gas nuisance incident has aroused public concern and once again brought the environmental issues of automobile manufacturing into public view.

In addressing global climate change, the sales of electric vehicles, represented by Tesla and BYD, continue to maintain strong momentum. However, it must be noted that even though electric vehicles do not produce exhaust emissions in the use phase, electricity mainly comes from coal-fired power plants, so there are still considerable pollution emissions. In the manufacturing process, carbon emissions, as well as gaseous pollutants and other pollutants, are significantly higher than in traditional fossil fuel vehicles. With the expanding production capacity, the environmental impact may increase if the electric vehicle companies do not effectively control pollutants and greenhouse gas emissions in the supply chains.



Source: Tesla Impact Report 2021



The manufacturing process for both electric vehicles and traditional fuel vehicles involves casting, welding, stamping, heat treatment, electroplating, painting, injection molding, and other manufacturing units. These processes generate a variety of pollutants such as exhaust gas, wastewater, hazardous waste, and a large number of greenhouse gas emissions. Exhaust gas emission is one of the key focuses of government environmental supervision because it generates dust and odor, affects residents in local communities, and causes public complaints and even social conflicts.

In 2021, the Institute of Public and Environmental Affairs (IPE) and Lvse Jiangnan Public Environmental Concerned Center (Lvse Jiangnan) found, in the investigation on environmental problems in the EV supply chain<sup>1</sup>, that several enterprises in the auto parts industry had multiple environmental violations related to exhaust gas pollution, including failing to install and use pollution prevention and control facilities in the VOCs (volatile organic compounds) generating process as required,<sup>2</sup> and received complaints from local residents due to odors from exhaust gases<sup>3</sup>.

During an investigation in May 2022, environmental groups again found environmental problems at several suspected Tesla suppliers. We also noticed that one of Tesla's factories in the U.S. have previously been penalized by the U.S. Environmental Protection Agency (hereinafter referred to as EPA) for violations related to air pollutants emissions.

## SUSPECTED SUPPLIERS OF TESLA PENALIZED FOR EXHAUST GAS POLLUTION

### ➤ **Parts Supplier Failed to Take Effective Measures to Control Dust Emissions in the Welding Section**

On April 24, 2022, the official website of the Jiangsu Provincial People's Government disclosed the notice on "Handling of the 20th batch of letters and visits handed over to our province by the Second

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<sup>1</sup> See "Tesla: Pollution under the Low Carbon Halo - Electric Vehicle Investigative Report I":

[http://wwwen.ipe.org.cn/reports/report\\_21159.html](http://wwwen.ipe.org.cn/reports/report_21159.html), and "TESLA & MORE: Electric Vehicle Investigative Report II":

[http://wwwen.ipe.org.cn/reports/report\\_21270.html](http://wwwen.ipe.org.cn/reports/report_21270.html) (Last accessed on June 16, 2022)

<sup>2</sup> <http://wwwen.ipe.org.cn/IndustryRecord/regulatory-record.aspx?companyId=10384556&dataType=0&isyh=0&showtype=0>

<sup>3</sup> <http://wwwen.ipe.org.cn/IndustryRecord/regulatory-record.aspx?companyId=293553&dataType=0&isyh=0&showtype=0>



Central Ecology and Environmental Protection Inspectorate"<sup>4</sup>. The notice showed that “Huada Auto Parts Co., Ltd.,<sup>5</sup> surrounded by residential areas on three sides, has electrophoresis workshops, painting workshops, and some workshops rented out. The workshops emitted pungent exhaust gas, similar to the smell of ammonia but not ammonia, from 2 am to 5 am, and produced noise nuisance." On April 15, 2022, the Standing Committee of Jingjiang Municipal CPC Committee and Vice Mayor of the Municipal Government led the Ecology and Environment Bureau of Jingjiang City, Jingcheng Subdistrict Office, and other relevant officials to inspect the progress of rectification of Huada Automotive Technology Co., Ltd. Based on the inspection results, the Ecology and Environment Bureau of Jingjiang City filed a case to investigate the violation of "the brazing section and welding section failing to use centralized collection and treatment measures to control dust emissions" , and proposed a fine of RMB 59,600, while “urged the company to install exhaust gas treatment facilities immediately per requirements of EIA”.

Company Name	Web link to Record	Summary of the Supervision Record
Huada Automotive Technology Co., Ltd.	<p>The Blue Map Database :</p> <p><a href="http://wwwwen.ipe.org.cn/IndustryRecord/regulatory-record.aspx?companyId=702076&amp;dataType=0&amp;isyh=0&amp;showtype=0">http://wwwwen.ipe.org.cn/IndustryRecord/regulatory-record.aspx?companyId=702076&amp;dataType=0&amp;isyh=0&amp;showtype=0</a></p> <p>Jiangsu Provincial People’s Government website: <a href="http://www.jiangsu.gov.cn/art/2022/4/24/art_85030_10424986.html">http://www.jiangsu.gov.cn/art/2022/4/24/art_85030_10424986.html</a></p>	<ol style="list-style-type: none"> <li>1. The Ecology and Environment Bureau of Jingjiang City filed a case to investigate the violation of "the brazing section and welding section failing to use centralized collection and treatment measures to control the dust emission", and proposed a fine of RMB 59,600, while urged the enterprise to install exhaust gas treatment facilities immediately per requirements of the EIA.</li> <li>2. The enterprise must improve ledger records for the operation of organic waste gas treatment facilities. The exhaust pipe sampling port should be kept closed when not sampling. Further strengthen the construction and management of exhaust gas treatment facilities. Ensure exhaust gas meets emission standards and is kept to the lowest level possible.</li> </ol>

<sup>4</sup> [http://www.jiangsu.gov.cn/art/2022/4/24/art\\_85030\\_10424986.html](http://www.jiangsu.gov.cn/art/2022/4/24/art_85030_10424986.html)

<sup>5</sup> Here quoted the original expression of the People's Government of Jiangsu Province, the enterprise's name under the Basic Information column was shown as “Huada Auto Parts Co., Ltd” whereas under the Investigation Verification column, it's shown as “Huada Automobile Technology Co., Ltd.”



Company Name	Web link to Record	Summary of the Supervision Record
		<p>3. The enterprise must strengthen environmental management, handle workpieces gently, and keep doors and windows closed during production.</p> <p>4. The Ecology and Environment Bureau of Jingjiang City will further strengthen the environmental supervision of the enterprise on noise and exhaust gas monitoring. Exceeding the emission standards will result in immediate law action.</p>

**Figure 1. Summaries and links to the environmental supervision record**

Huada Automotive Technology Co., Ltd. (hereinafter referred to as "Huada Technology", stock code: 603358), which is under investigation, **disclosed in its 2021 annual report that it is a supplier of Tesla.**<sup>6</sup>

<p>(二) 推进资源优化，增强发展后劲</p> <p>1. 优化客户资源。以市场需求为导向，加大产品、品牌推广力度。在不断稳步提升与本田、丰田、通用、大众等老客户订单基础上，先后与特斯拉、长城汽车、理想等新能源重要客户建立了配套协作关系，不仅订单份额增加，还因合作关系产生的背书效应大大提升了公司在行业中的地位和知名度。</p>
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Source: Huada Technology 2021 Annual Report

After a public search, environmental groups have not seen any public explanation of the aforementioned environmental issues from Huada Technology through its official website or announcements at the time of publication.

In response to the issues with this suspected supplier, IPE and Lvse Jiangnan wrote to Tesla on May 25, 2022, requesting it to follow up and confirm the problems and corresponding actions. However, we have not received any response from Tesla at the time of publication.

➤ **Subsidiary of parts supplier ordered to take corrective action for failing to set sampling points at exhaust outlets**

<sup>6</sup> <http://static.cninfo.com.cn/finalpage/2022-04-29/1213218441.PDF>



Listed company Nanjing Yunhai Special Metal Co., Ltd. (hereinafter referred to as "Yunhai Metal", stock code 002182), replied to investors on the Q&A page on Juchao Information Network ([www.cninfo.com.cn](http://www.cninfo.com.cn)) on May 11, 2022 that the company indirectly supplies Tesla with steering wheels, air conditioning micro-channel flat tubes, ball joints, swing arms, oil cooler covers, and various other parts.<sup>7</sup>

**问** 你好董秘，特斯拉上海工厂大幅扩产会对公司有影响吗？公司为特斯拉提供哪些零部件？特斯拉自身有深加工能力，公司是否为其提供原材料？

2022-05-05 09:33:09

**答** 公司间接给特斯拉供应方向盘、空调微通道扁管、球头、摆臂和油冷盖板等多种部件。

2022-05-11 17:10:56

Source: Yunhai Metal's Q&A page on Juchao Information Network ([www.cninfo.com.cn](http://www.cninfo.com.cn)), accessed on May 11, 2022

In January 2021, the Nanjing Ecology and Environment Bureau's "double random (*ShuangSuiJi*)" inspection report showed that Nanjing Yunkai Alloy Co. Ltd.,<sup>8</sup> a wholly owned subsidiary of Yunhai Metal, was ordered by Nanjing Ecology and Environment Bureau to rectify for environmental violations as follows:

"1. Failed to set up sampling points and signs at the exhaust outlets of the casting and rolling equipment. 2. Failed to register hazardous waste online in 2019 and 2020 according to the provincial hazardous waste management system. 3. Failed to update operation standards and exhaust port information on the discharge permit."<sup>9</sup>

Further investigation shows that Nanjing Yunkai Alloy Co., Ltd. was once investigated by the local department of ecology and environment in 2019 for problems such as the furnace exhaust gas collection hood not being completely sealed, causing exhaust emissions, etc.

In response to the issues with this suspected supplier, IPE and Lvse Jiangnan wrote to Tesla on June 10, 2022, requesting it to follow up and confirm the problems and corresponding actions. However, we have not received any response from Tesla at the time of publication.

<sup>7</sup> <http://www.cninfo.com.cn/new/disclosure/stock?stockCode=002182&orgId=9900003827#interactiveQa>

<sup>8</sup> According to its 2021 annual report, Yunhai Metal holds 100% of Nanjing Yunkai Alloy Co., Ltd.'s shares.

<sup>9</sup> <http://www.ipe.org.cn/IndustryRecord/regulatory-record.aspx?companyId=138880&dataType=0&isYH=0>



➤ **Structural safety parts supplier penalized: Pollution prevention equipment failed to pass inspection before welding process put in operation**

HyUnion Holding (stock code 002537), a listed company, mentioned in its response to investors' questions on May 31, 2022, that the company supplies structural safety components to Tesla.<sup>10</sup>



Source: HyUnion Holding's Q&A page on Juchao Information Network, accessed on May 31, 2022

Baoji Taihong Electromechanical Co., Ltd., a subsidiary of HyUnion Holding<sup>11</sup>, was fined RMB 200,000 by the Baoji Ecology and Environment Bureau in October 2020 for "putting the welding process into operation without the pollution prevention and control equipment passing inspection" (Shaan C Penalty [2021] No. 30).<sup>12</sup>

Baoji City, where the enterprise is located, is in the Fenwei Plain. The wind speed in the Weihe Valley is generally low, which is disadvantageous to the diffusion of pollutants and is one of the key areas for Blue Sky Protection Campaign.<sup>13</sup> If the dust-producing enterprises do not effectively control the substantial amounts of dust generated from welding and other processes, it may have a negative impact on the effectiveness of local air pollution prevention and control.

In response to the issues with this suspected supplier, IPE and Lvse Jiangnan wrote to Tesla on June 10, 2022, requesting it to follow up and confirm the problems and corresponding actions. However, we have not received any response from Tesla at the time of publication.

<sup>10</sup> <http://www.cninfo.com.cn/new/disclosure/stock?stockCode=002537&orgId=9900016929#interactiveQa>

<sup>11</sup> According to its 2021 annual report, HyUnion indirectly holds 100% of Baoji Taihong Electromechanical Co., Ltd.'s shares.

<sup>12</sup> <http://wwwen.ipe.org.cn/IndustryRecord/regulatory-record.aspx?companyId=10171277&dataType=0&isYH=0>

<sup>13</sup> [http://www.cma.gov.cn/2011xwzx/2011xqxxw/2011xqxyw/201901/t20190118\\_512871.html](http://www.cma.gov.cn/2011xwzx/2011xqxxw/2011xqxyw/201901/t20190118_512871.html)



## OTHER ENVIRONMENTAL ISSUES OF TESLA'S SUSPECTED SUPPLIERS

During our investigation, we also noticed that some of Tesla's suspected suppliers and their subsidiaries had other environmental issues exposed during the ecology and environmental departments' 2022 "double random (*ShuangSuiJi*)" inspections.

The "Record of Investor Relations Activities" disclosed in June 2022 by Wanxiang Qianchao Co., Ltd. (hereinafter referred to as "Wanxiang Qianchao", stock code: 000559) indicates that the company is a Tier 2 supplier of Tesla.<sup>14</sup>

**问题9：公司作为二级供应商主要为特斯拉提供什么产品？**

市场部总经理闻超先生答：有很多，比如说三叉、包括一些球笼部件。现在是供零件，下一步的目标是供应总成，比如说高速轴承，轮毂单元，驱动轴，这些产品都是在努力的一个方向。

Source: Wanxiang Qianchao Record of Investor Relations Activities

In January 2022, Wanxiang Qianchao's subsidiary Wanxiang Precision Industry Jiangsu Co., Ltd.<sup>15</sup> was ordered by Taizhou Ecology and Environment Bureau to take corrective actions for "failing to collect sludge generated from sewage treatment facilities to the hazardous waste warehouse in a timely manner"<sup>16</sup> during a "double random (*ShuangSuiJi*)" inspection in Taizhou City. It was not the first time that environmental agencies disclosed the poorly managed sewage treatment facilities in this company. In April 2021, during a "double random (*ShuangSuiJi*)" inspection, the local ecology and environmental authorities ordered the company to rectify due to "1. incorrect collection of sludge leachate from sewage treatment facilities; 2. failing to obtain a discharge permit."

In addition, the first quarterly "double random (*ShuangSuiJi*)" inspection in 2022 conducted by Changzhou Ecology and Environment Administrative Law Enforcement Bureau showed that Changzhou

<sup>14</sup> <http://static.cninfo.com.cn/finalpage/2022-06-07/1213619859.PDF>

<sup>15</sup> According to its 2021 annual report, Wanxiang Qianchao indirectly holds 100% of Wanxiang Precision Industry Jiangsu Co., Ltd.'s shares.

<sup>16</sup> <http://www.wen.ipe.org.cn/IndustryRecord/regulatory-record.aspx?companyId=160741&dataType=0&isYH=0>



Tenglong Auto Parts Inc. (hereinafter referred to as "Tenglong", stock code: 603158) was "found with issues and have been ordered to rectify".<sup>17</sup>

Tenglong's 2021 annual report showed that the company is supplying car brands such as Tesla through system suppliers.<sup>18</sup>

(二) 主要客户  
公司主要客户包括本田、沃尔沃、福特、大众、马自达、Stellantis、吉利、上汽、通用五菱、一汽、长安、长城、东风、广汽、北汽、比亚迪、蔚来、小鹏、理想等多家国内外汽车整车制造企业，也包括法雷奥、马勒、翰昂、大陆、博世等国际知名汽车零部件系统供应商，并通过系统供应商配套于特斯拉、玛莎拉蒂、保时捷、奔驰、宝马、奥迪、丰田、大众等全球知名汽车品牌，产品远销欧洲、北美、东南亚、南美等地。

Source: Tenglong 2021 Annual Report

In 2021, the Ministry of Ecology and Environment issued the "Guidance on Further Strengthening the "Double Random, One Open (*ShuangSuiJi, YiGongKai*)" Supervision of the Ecology and Environment" ([2021] No. 18),<sup>19</sup> which proposes to "establish an annual statistical system for the number of times an enterprise is inspected to assess the effectiveness of inspections and the compliance of enterprise and adjust the inspection plan scientifically". If an enterprise was found with issues repeatedly in the "double random" inspections, which expose its environmental risks, it may lead to an increase in the frequency of supervision and inspection.

In response to the issues with the above suspected suppliers, IPE and Lvse Jiangnan wrote to Tesla on June 10, 2022, requesting it to follow up and confirm the problems and corresponding actions. However, we have not received any response from Tesla at the time of publication.

**MOST ENTERPRISES DID NOT DISCLOSE INFORMATION REGARDING ENVIRONMENTAL ISSUES**

<sup>17</sup> <http://www.ipe.org.cn/IndustryRecord/regulatory-record.aspx?companyId=332709&dataType=0&isyh=0&showtype=0>

<sup>18</sup> <http://static.cninfo.com.cn/finalpage/2022-04-28/1213163975.PDF>

<sup>19</sup> [https://www.mee.gov.cn/xxgk/xxgk05/202107/t20210716\\_847363.html](https://www.mee.gov.cn/xxgk/xxgk05/202107/t20210716_847363.html)



By analyzing published materials, we found that Tesla's suspected suppliers and their subsidiaries have generated numerous environmental impacts in the manufacturing process. Their violations include failing to **use centralized collection and treatment measures to control dust emissions**, starting production before pollution prevention and control facilities passed inspection, and improper management of hazardous waste, etc.

As the main body of pollution prevention and control, enterprises have the responsibility to publicly disclose the causes for environmental problems, the rectification measures planned or taking place, and their results, so as to accept public supervision.

We hope that the aforementioned suppliers can undertake their main responsibility of environmental information disclosure according to laws and regulations. We also hope that brands can pay attention to and motivate their suppliers to actively fulfill their environmental responsibility.

## **TESLA FALLEN SILENT FACING QUESTIONING**

The recent high-profile comments by Tesla's founder regarding the ESG rating have drawn widespread attention. However, Tesla has again fallen silent in the face of specific questions from Chinese environmental groups about pollution issues in its supply chain.

In response to the aforementioned environmental issues of Tesla's suspected suppliers, IPE and Lvse Jiangnan have sent two letters to Tesla on May 25 and June 10, 2022, asking it to follow up and confirm the existence of the problems and the progress of rectification. However, we have not received any response from Tesla at the time of publication.

Since 2019, we have written to Tesla several times regarding the environmental issues of its supply chain in China, and have published two investigative reports in 2021: "Tesla: Pollution under the Low Carbon Halo - Electric Vehicle Investigative Report I" and "TESLA & MORE: Electric Vehicle Investigative Report II". In the meantime, we wrote to Tesla several times hoping that it would confirm the issues related to supply chain environmental management found in our investigation. However, Tesla did not provide its first and so far, the only non-public response to the environmental groups until



September 30, 2021, and did not disclose specific corrective measures of suppliers involved in the environmental violations.

In its Impact Report 2021, Tesla stated that it has a supplier audit program to identify and address environmental and social risks within its supply chain, and engage directly with suppliers to understand their corrective action plans.<sup>20</sup> However, throughout the report and its website, we do not see Tesla's oversight of supply chain environmental management, the progress of the audit, or the specific measures for suppliers to rectify the violations, nor do we know whether the measures have been fully implemented.

**How we identify and prioritize risks in our supply chain**

Our Supplier Audit program is an important part of our efforts to identify and address environmental and social risks within our supply chain. These audits allow for a snapshot of a supplier facility's programs and procedures, but also sets a baseline for future evaluations. Additionally, Tesla utilizes other avenues to evaluate potential risks in our supply chain such as those detailed below.

We engaged with several third-party service providers allowing us to continually monitor our supply chain for emerging issues that may affect our suppliers. These include issues related to labor relations, human rights and environmental degradation. This monitoring allows our Global Supply Managers to be notified as soon as information about suppliers becomes public and act by engaging directly with the supplier to understand their plans for correcting the identified risk.

Source: Tesla Impact Report 2021

## TESLA'S VIOLATION OF THE U.S. CLEAN AIR ACT

During our research, we also found that one of Tesla's factories in the United States had been penalized by the U.S. Environmental Protection Agency (EPA). On several occasions between October 2016 and September 2019, Tesla violated the relevant provisions of the U.S. Clean Air Act for exhaust gas control.

Based on several information requests to Tesla, EPA determined that the company violated federal Clean Air Act regulations known as National Emission Standards for Hazardous Air Pollutants for Surface Coating of Automobiles and Light-Duty Trucks from October 2016 through September 2019 by:

- Failing to develop and/or implement a work practice plan to minimize hazardous air pollutants emissions from the storage and mixing of materials used in vehicle coating operations.
- Failing to correctly perform required monthly emissions calculations needed to demonstrate that the facility's coating operations complied with federal hazardous air pollutant standards.
- Failing to collect and keep all required records associated with the calculation of the hazardous air pollutants emission rate for Tesla's coating operations.

<sup>20</sup> [How we identify and prioritize risks in our supply chain](#)



Source: U.S. Environmental Protection Agency (EPA) website<sup>21</sup>

We also note that the Tesla Berlin plant, which has just obtained the environmental permits, also had a paint leak incident in April this year, which was widely reported by the local media.<sup>22</sup>

## **TESLA YET TO DISCLOSE SUPPLY CHAIN CARBON FOOTPRINT**

As an industry leader with nearly one million vehicles sold annually, carbon emissions reduction has been one of Tesla's main selling points. But in reality, Tesla has publicly called on automakers to push for an industry-wide shift to EVs "as a significant reduction of emissions will only be achieved if all carmakers push for an industry-wide shift to EVs", while on the other hand its supply chain greenhouse gas accounting disclosure efforts remain slow.<sup>23</sup>

While it is well known that the emissions reduction potential of EVs comes primarily from the absence of fossil fuel consumption during their use phase, numerous studies have shown that GHG emissions from the manufacturing phase of automobiles and parts are one of the top sources of enterprise-wide emissions for the industry.<sup>24</sup>

Data disclosed by Tesla in its Impact Report 2021 also shows that without the use of solar power, the Model 3Y's carbon emissions during the vehicle manufacturing phase account for approximately one-third of its lifecycle carbon emissions. As the share of green power in the regional grid rises, so does the share of carbon emissions from the manufacturing phase of the vehicle.

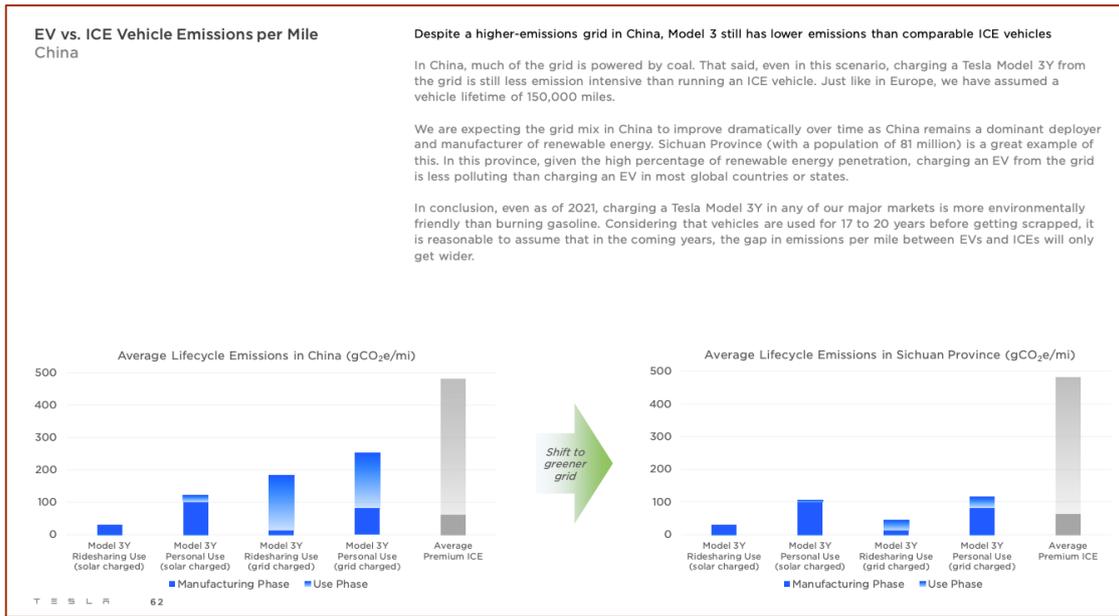
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<sup>21</sup> <https://www.epa.gov/newsreleases/us-epa-settles-tesla-over-clean-air-act-violations-fremont-calif-facility>

<sup>22</sup> <https://www.rbb24.de/studiofrankfurt/wirtschaft/2022/05/brandenburg-tesantragtla-grueneliga-untersagung-betriebserlaubnis-be.html>

<sup>23</sup> [https://www.tesla.com/ns\\_videos/2021-tesla-impact-report.pdf](https://www.tesla.com/ns_videos/2021-tesla-impact-report.pdf)

<sup>24</sup> [https://sciencebasedtargets.org/resources/legacy/2018/12/GBT\\_Value\\_Chain\\_Report-1.pdf](https://sciencebasedtargets.org/resources/legacy/2018/12/GBT_Value_Chain_Report-1.pdf)



Source: Tesla Impact Report 2021

Tesla has proposed in its 2020 Impact Report that it would collect measured GHG emissions data from suppliers and disclose GHG emissions data for its Scope 3 emissions in 2021.<sup>25</sup>

**Our lifecycle analysis (LCA) combines Scope 1 and 2, and material Scope 3 emissions\* for a Fremont-made Model 3**

While we are implementing processes to be able to measure and report Scope 1, 2 and 3 emissions on an enterprise level starting with our 2021 report, for the purpose of this report, we have conducted an LCA which includes the vast majority of Scope 1, 2 and 3 emissions, including the vehicle manufacturing phase, emissions from our supply chain, vehicle use and end-of-life for a Fremont-made Model 3. While not a perfect measure, given the importance of the Model 3 and its high volume of deliveries since 2018, it is a good proxy for understanding the emissions impact of our vehicle business. The details and boundaries of this LCA analysis are described on page 90. Our goal is to eventually produce an LCA for each of our products in addition to reporting our Scope 1, 2 and 3 emissions.

Source: Tesla Impact Report 2020

In the 2021 report, however, we can see that the Scope 3 emissions information disclosed by Tesla only includes GHG emissions data for the use phase of the product and does not cover the other Scope 3 categories, particularly "purchased goods and services," i.e., carbon emissions from the manufacturing process for the various types of components involved in the manufacture of EVs.

<sup>25</sup> [https://www.tesla.com/ns\\_videos/2020-tesla-impact-report.pdf](https://www.tesla.com/ns_videos/2020-tesla-impact-report.pdf)



Metric	Unit of Measure	Manufacturing	SSD <sup>1</sup>	Other <sup>2</sup>	TOTAL
Scope 1 GHG emissions	tCO <sub>2</sub> e	124,000	31,000	30,000	185,000*
Scope 2 GHG emissions (location-based)	tCO <sub>2</sub> e	342,000	35,000	26,000	403,000*
Scope 3   Category 11: Use of Sold Products (EV charging)	tCO <sub>2</sub> e				1,954,000

<sup>1</sup>SSD = Sales, Service & Delivery  
<sup>2</sup>Other includes sites that conduct research & development, administration, energy product warehousing and deployment, and other mixed-used warehousing.  
\*PwC performed an attest review engagement on this metric. See their report on page 138.

Source: Tesla Impact Report 2021

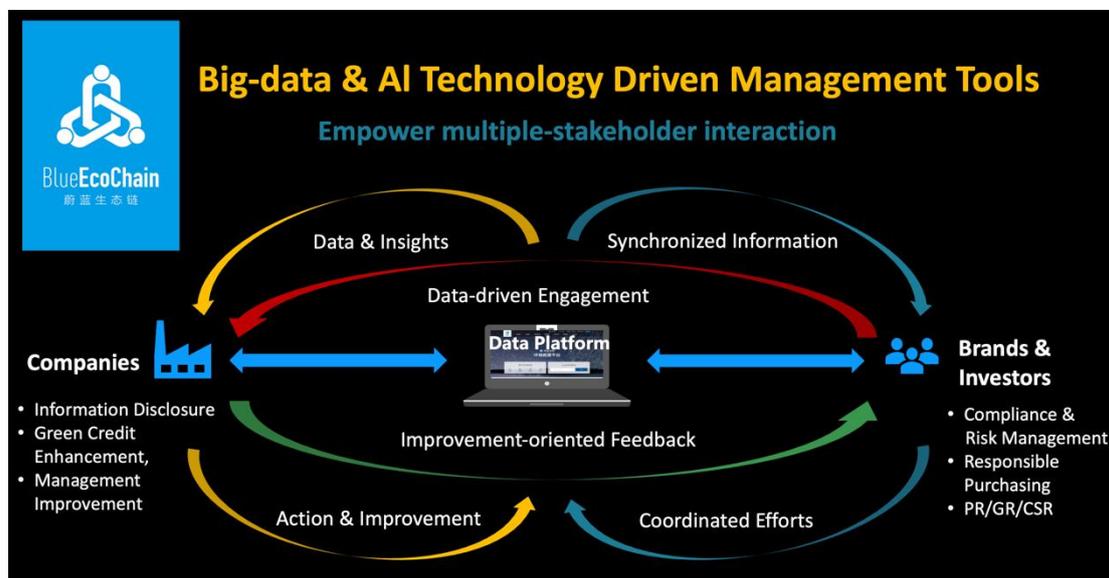
In addition to the slow progress in promoting GHG accounting disclosure for its supply chain, we still have not seen Tesla publicly disclose any specific GHG emissions reduction targets, let alone track its progress in reducing emissions at the manufacturing stage of its vehicles and components.

**GREEN SUPPLY CHAIN MANAGEMENT PRACTICE OF LEADING BRANDS**

Traditional enterprises have often been criticized for "greenwash" and "climate failure" during green transformation for failing to meet their promises and not acting towards their targets. According to our observation, Tesla, which has claimed to be environmentally friendly, has not achieved significantly results than those traditional enterprises in terms of environmental and climate governance in its supply chain. This is not in line with the expectations of all parties.

Since its establishment in 2006, IPE has developed and operated the [Blue Map Database](#), which collects public environmental information through official government sources and collates it into a user-friendly database. It facilitates stakeholders to retrieve environmental information, participate in and monitor environmental protection work in accordance with the law, and help build a modern environmental governance system with multi-party participation to promote the improvement of ecology and environmental quality and collaborative management of pollution and carbon emissions reduction.

Based on ecological and environmental big data and IT technologies, IPE has developed the [Blue Ecochain](#) tool to help brands significantly improve the efficiency and effectiveness of environmental management and climate governance in their supply chains.



IPE Blue Ecochain

By the end of May 2022, more than 100 global and Chinese leading brands and corporations have used the Blue Map Database and Blue Ecochain tool to track their suppliers' environmental performance and greenhouse gas emissions in China, and have motivated a grand total of nearly [20,000 \(click to view\)](#) suppliers to engage with IPE to take corrective measures against non-compliance issues and publicly disclose the progress of corrective actions and environmental data. Meanwhile, by improving suppliers' GHG accounting capability, brands encourage suppliers to measure and disclose GHG emission data and set GHG emission reduction goals for the supply chain via the Blue Map Database, assist suppliers in carrying out emission reduction actions and track their progress. Thus, driving the industry chain to continuously improve environmental performance and achieve green transformation.

We hope that Tesla and other electric vehicle companies (some of the aforementioned companies with environmental violations are also suspected suppliers of BYD, NIO, Li Auto, XPENG and other electric vehicle companies as well as some traditional vehicle companies) can learn from the green supply chain management practice of leading brands, accelerate green supply chain management progress, effectively fulfill the environmental commitments from supply chain environmental compliance to



continuous improvement, and expand the positive impact on the industry and the world in the whole product life cycle.

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