

CATL

Carbon Accounting Report 2021





About this Report

This report is the first carbon accounting report issued by Contemporary Amperex Technology Co. Limited and its subsidiaries (hereinafter referred to as "CATL", "the Company" or "we"), which discloses the Greenhouse Gases emissions from the Company's own operations and the key segments of its value chain.




Reporting Scope

The data disclosed in this report includes those of the domestic and overseas subsidiaries in the sector of battery production of CATL. Among them, some branches and subsidiaries had no production activity in 2021, and therefore the final data were about those of the 12 companies which were put into production in 2021 (the list is shown below). The Company aims to gradually improve the statistical scope of its relevant data.

Table of Names and Abbreviations of Domestic and Overseas Subsidiaries in Battery Product Manufacturing Sector

No.	Company Name
1	Contemporary Amperex Technology Co., Limited (CATL)
2	Qinghai Contemporary Amperex Technology Co., Limited (CATL-QH)
3	Jiangsu Contemporary Amperex Technology Co., Limited (CATL-JS)
4	United Auto Battery Co., Ltd. (UABC)
5	Dongfeng Amperex (Wuhan) Battery System Co., Ltd. (DABS)
6	CATL-FAW Auto Battery Co., Ltd. (CFBC)
7	CATL-GAC EV Battery Co., Limited (CGBC)
8	Sichuan Contemporary Amperex Technology Co., Limited (CATL-SC)
9	Chengdu Xinjin Contemporary Amperex Technology Co., Limited (CATL-XJ)
10	Yibin Contemporary Energy Storage Technology Co., Ltd (CATL-YB)
11	Ruiting (Shanghai) Contemporary Amperex Technology Co., Limited (CATL-RT)
12	Contemporary Amperex Technology Thuringia GmbH (CATT) ¹

Note 1: The environmental data sources include the module line of CATT, which was put into production in 2021.



Reporting Period

The data in this report covers the period from January 1, 2021 to December 31, 2021.



Calculation Method and Verification Standard

This report is prepared according to *Greenhouse Gas (GHG) Protocol – A Corporate Accounting and Reporting Standard and ISO 14064-1:2018 Greenhouse Gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*. To improve the reliability of the reporting data, the Company entrusts a third party to carry out independent verification in accordance with *ISO 14064-3:2019 Greenhouse Gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements*. See the appendix to this report for the *Greenhouse Gas Verification Statement obtained by the Company*.

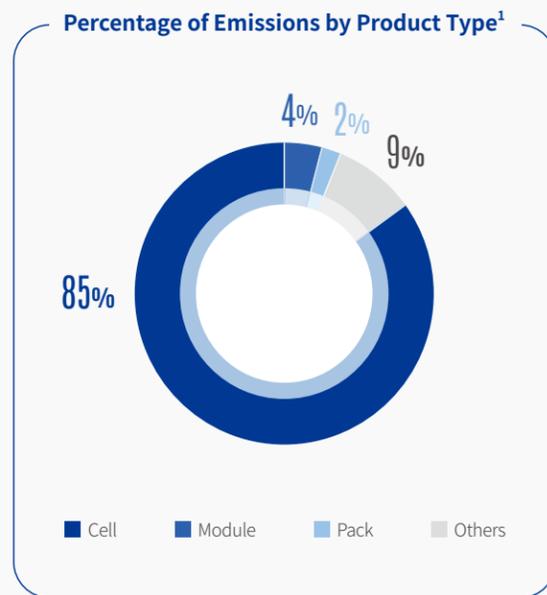
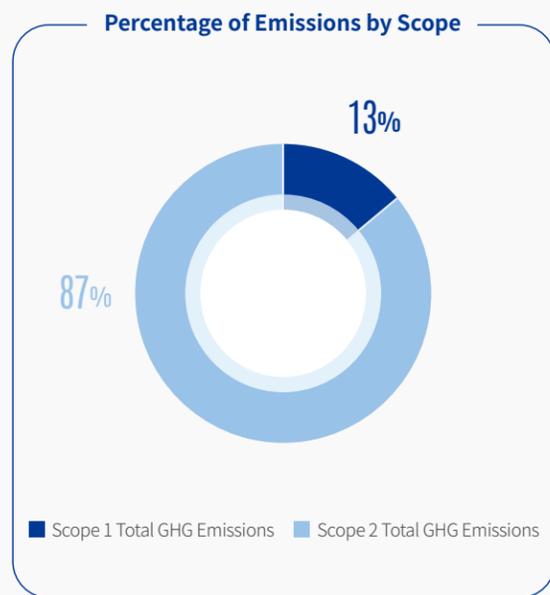
In this report, "Scope 1 emissions" refers to the emissions generated by the emission sources directly controlled or owned by the Company, corresponding to "Direct Emissions" in *ISO 14064-1:2018*; "Scope 2 emissions" refers to the indirect emissions from outsourced power, steam, heating or cooling for the Company's own use, corresponding to the "Indirect Emissions from Imported Energy" in *ISO 14064-1:2018*; "Scope 3 emissions" refers to the emissions in the upstream value chain of the Company, corresponding to the sum of "Indirect Emissions from Transportation" and "Indirect Emissions from Products Used by An Organization" in *ISO 14064-1:2018*.

Carbon Accounting Results

In 2021, the Company carried out carbon emission data accounting for domestic and overseas subsidiaries in the battery product manufacturing sector to fully understand the impact of its own operation. From January 1, 2021 to December 31, 2021, the emissions of subsidiaries within the scope of this report are shown in the table below:

Table 1: Emissions of 12 Subsidiaries in 2021

Emission Category	Unit	2021
Scope 1 GHG Emissions	Tons of carbon dioxide equivalent	303,120.23
Scope 2 GHG Emissions	Tons of carbon dioxide equivalent	1,959,621.64
GHG Emissions (Scope 1+ Scope 2)	Tons of carbon dioxide equivalent	2,262,741.87



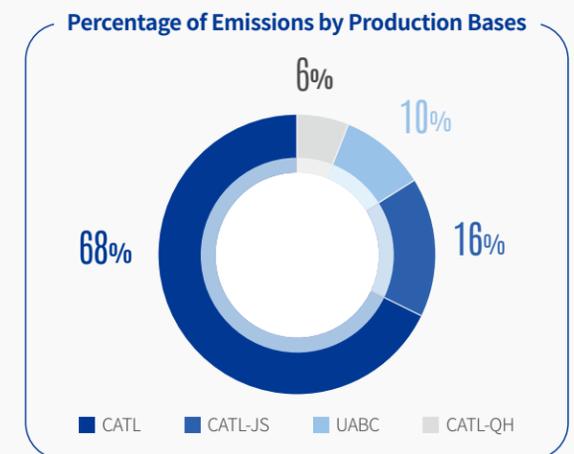
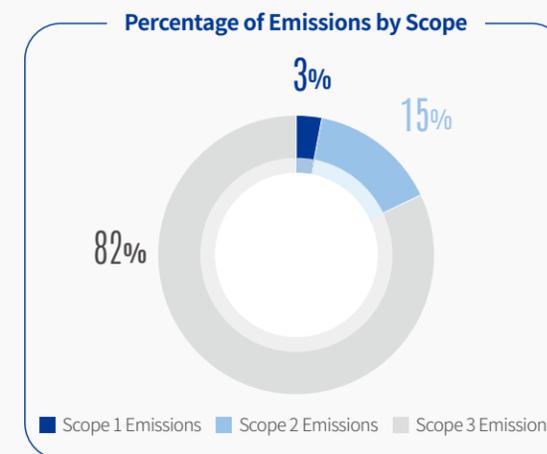
¹ Emissions by product type only include Scope 1 and Scope 2.

In 2021, the Company entrusted a third party to carry out independent verification in accordance with *ISO 14064-3:2019 Greenhouse Gases —Part 3: Specification with guidance for the verification and validation of greenhouse gas statements*². According to the materiality principle, the Company prioritizes the bases that have been stable in production and operation for more than one year and have a substantial impact on the Company's overall emissions as the verification subject. The verification scope covers CATL³, CATL-JS, CATL-QH and UABC. It is estimated that the emissions from these four bases' operations (Scope 1 + Scope 2) account for approximately 70% of the emissions from the operations of the 12 subsidiaries disclosed in this report.

The verification scope of the four bases' emission data includes Scope 1, Scope 2 and Scope 3 emissions. The data of the verified bases from January 1, 2021 to December 31, 2021 are shown in the table below.

Table 2: Emissions of the Four Verified Bases in 2021

Emission Category	Unit	2021
Scope 1 GHG Emissions	Tons of carbon dioxide equivalent	256,458.29
Scope 2 GHG Emissions	Tons of carbon dioxide equivalent	1,327,595.65
Scope 3 GHG Emissions	Tons of carbon dioxide equivalent	7,339,949.42
GHG Emissions (Scope 1+ Scope 2+ Scope 3)	Tons of carbon dioxide equivalent	8,924,003.36



² After verification, the emission data of the Company in 2021 has been adjusted accordingly. The total emission of scope 1 and scope 2 is approximately 3% lower than the accounting data disclosed in the *CATL 2021 Environmental, Social and Governance (ESG) Report*.

³ "CATL" here refers to Ningde production base.

⁴ Verification of Scope 3 Emissions covers the main raw material suppliers. The verification category includes indirect GHG emissions from transportation and indirect GHG emissions from products used by the organization.

Progress of Carbon Reduction Actions

We firmly take the path of low carbon development. CATL is committed to achieving the goal of realizing fossil fuel replacement in stationary and mobile energy systems with highly efficient electrical power systems that are generated through advanced batteries and renewable energy, and promoting the integrated innovation of market applications through electrification and intelligentization. Bolstered by continuous innovation, we will contribute to the building of a new power system mainly composed of new energy.

In 2021, we continued to carry out energy conservation and emission reduction projects to increase the proportion of green power usage. In addition, we have invested in the construction of "Lighthouse Factory" and "Zero-Carbon Factory", made full use of artificial intelligence, cloud computing and intelligent energy management technologies to continuously improve the efficiency of production and operation and reduce the energy consumption in production, taking firm steps towards carbon neutrality.

Strengthen Energy Management and Realize Energy Conservation and Emission Reduction



Adopt a Cleaner Energy System



The World's First "Lighthouse Factory" in Battery Industry

The Global Lighthouse Network (GLN) is a community of the world's leading manufacturers advancing next-generation levels of efficiency through innovation. "Lighthouse Factory" are deemed as pioneers of the Fourth Industrial Revolution because of the stringent selection criteria.

In September 2021, our Ningde production base was selected as a member of the Global Lighthouse Network, becoming the first battery production base in the world to join the community. Ningde production base has greatly improved production efficiency and competitiveness while taking into account environmental management, and has achieved low defect rate and high production efficiency, improving labour productivity by 75% and reducing energy consumption by 10%.

The World's First Zero-Carbon Factory in New Energy Industry

CATL continues to move towards the goal of achieving carbon neutrality. Through continuous improvement and innovation in energy utilization, transportation and logistics, and manufacturing, the Yibin production base has managed to unremittingly optimize production mode and reduce carbon emissions. It has been certified as the world's first zero-carbon factory in the new energy industry.

By the end of the reporting period, the Yibin production base of CATL-SC has achieved operational carbon neutrality. In the future, we expect Yibin production base to set an example of carbon neutrality in battery manufacturing, and promote the zero-carbon transformation of new energy industry chain. At the same time, we regard Yibin production base as an important milestone and a new starting point, and will realize carbon neutrality of the top ten bases worldwide one after another, making contributions to the global efforts to tackle climate change.

The Path to Yibin Zero-Carbon Plant

Green Energy

Preferred Low-carbon Energy: Located at the intersection of Jinsha River, Minjiang River and Yangtze River, Yibin is rich in water resources and can provide hydroelectricity for the Yibin production base, which reduces carbon emissions by about 400,000 tons compared with traditional thermal power. We maximize the use of green electricity to provide sufficient green energy for manufacturing.

Energy Efficiency Management: Intelligent CATL facility management system (CFMS) was officially launched in 2021, aiming to optimize the operation strategy of the factory and minimize the total energy consumption through 5G real-time equipment monitoring and big data calculation.

Green Manufacturing

Digital Production Management System: In 2021, a digital production central control management system was set up to comprehensively control the production process and effectively reduce the process loss.

Closed-loop Management of Waste Recycling: The production waste is handed over to Guangdong Brunp, a subsidiary of CATL, for recycling, and it has achieved a recovery rate of 99.3% of nickel, cobalt and manganese metals.

Green Logistics and Transportation

Electrification of Logistics: Self-driving logistics vehicles, electric trucks and electric forklifts are introduced to realize zero-carbon operation among supplier factories, raw material warehouses, processing factories, finished product warehouses and customer factories.

Green Transportation: Provide electric buses and bike-sharing for employees, encourage them to use new energy vehicles, and the employees shall get extra rewards if they pick up colleagues on the way.

Appendix: Information about Third Party Verification

Statement of Conformity CN22/00001170

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in 01 Jan. 2021 to 31 Dec. 2021 of

Contemporary Amperex Technology Co., Limited

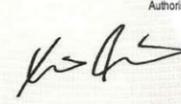
Business address: No. 2 Xin'gang Road, Zhangwan Town, Jiaocheng District, Ningde City, Fujian Province, P.R. China

Organization boundary: 21C Innovation Laboratory, Lake West District (East China Industrial Center Industrial Road East, Reunion Road North, Construction Road West), Huxi Phase III North (North side of Yanning Railway, 104 National Road East, Fengyutang Flood Zone South Side, West Side of Industrial Road), Huxi Phase III South Zone), No. 2, Xingang Road, Zhangwan Town, Jiaocheng District, Ningde City, Fujian Province, P.R. China

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Direct Emissions [Category 1]	167,435.9 tonnes of CO ₂ e
Indirect Emissions from Imported Energy [Category 2]	884,896.15 tonnes of CO ₂ e
Indirect Emissions from Transportation [Category 3]	10,137.28 tonnes of CO ₂ e
Indirect Emissions from Products Used by An Organization [Category 4]	5,019,608.21 tonnes of CO ₂ e
Indirect Emissions Associated with The Use of Products from The Organization [Category 5]	[be determined as non-significant indirect emissions and not quantified]
Indirect Emissions from Other Sources [Category 6]	[be determined as non-significant indirect emissions and not quantified]
Total Emissions Quantified	6,082,077.53 tonnes of CO₂e

Authorised by 

DATE: 22 May 2022

SGS-CSTC Standards Technical Services Co., Ltd.
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Statement of Conformity CN22/00001296

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in 01 Jan. 2021 to 31 Dec. 2021 of

Jiangsu Contemporary Amperex Technology Co., Limited

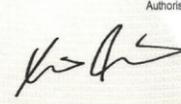
Business address: No. 1000 Chengbei Avenue, Kunlun Street, Liyang City, Jiangsu Province

Organization boundary: No. 1000 Chengbei Avenue, Kunlun Street, Liyang City, Jiangsu Province, P.R. China

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Direct Emissions [Category 1]	63,313.23 tonnes of CO ₂ e
Indirect Emissions from Imported Energy [Category 2]	303,627.44 tonnes of CO ₂ e
Indirect Emissions from Transportation [Category 3]	935.81 tonnes of CO ₂ e
Indirect Emissions from Products Used by An Organization [Category 4]	1,060,064.57 tonnes of CO ₂ e
Indirect Emissions Associated with The Use of Products from The Organization [Category 5]	[be determined as non-significant indirect emissions and not quantified]
Indirect Emissions from Other Sources [Category 6]	[be determined as non-significant indirect emissions and not quantified]
Total Emissions Quantified	1,427,941.05 tonnes of CO₂e

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DATE: 28 May 2022

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Appendix: Information about Third Party Verification

Statement of Conformity CN22/00001165

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in 01 Jan. 2021 to 31 Dec. 2021 of

Qinghai Contemporary Amperex Technology Limited.

Business address: No. 182, Chuangye Road, Chengzhong District, Xi'ning City, Qinghai Province, P.R. China
 Organization boundary: No. 182, Chuangye Road, Chengzhong District, Xi'ning City, Qinghai Province, P.R. China

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Direct Emissions [Category 1]	1,064.66 tonnes of CO2e
Indirect Emissions from Imported Energy [Category 2]	8,019.67 tonnes of CO2e
Indirect Emissions from Transportation [Category 3]	34,947.44 tonnes of CO2e
Indirect Emissions from Products Used by An Organization [Category 4]	493,519.68 tonnes of CO2e
Indirect Emissions Associated with The Use of Products from The Organization [Category 5]	[be determined as non-significant indirect emissions and not quantified]
Indirect Emissions from Other Sources [Category 6]	[be determined as non-significant indirect emissions and not quantified]
Total Emissions Quantified	537,551.44 tonnes of CO2e

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Statement of Conformity CN22/00001167

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in 01 Jan. 2021 to 31 Dec. 2021 of

SAIC POWER BATTERY CO., LTD.

Business address: No. 328, Huanyuan Xi Road, Liyang, Jiangsu Province
 Organization boundary: No. 328, Huanyuan Xi Road, Liyang, Jiangsu Province, P.R. China

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Direct Emissions [Category 1]	24,644.49 tonnes of CO2e
Indirect Emissions from Imported Energy [Category 2]	131,052.39 tonnes of CO2e
Indirect Emissions from Transportation [Category 3]	2,434.84 tonnes of CO2e
Indirect Emissions from Products Used by An Organization [Category 4]	718,301.61 tonnes of CO2e
Indirect Emissions Associated with The Use of Products from The Organization [Category 5]	[be determined as non-significant indirect emissions and not quantified]
Indirect Emissions from Other Sources [Category 6]	[be determined as non-significant indirect emissions and not quantified]
Total Emissions Quantified	876,433.33 tonnes of CO2e

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CATL reserves the right of final interpretation of this Report. Please contact us if you have any feedback or suggestions.

CATL

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