

Opinion Statement

Greenhouse Gas Emissions Verification Opinion Statement

This is to verify that: Chunghua Telecom Co., Ltd.
No. 21-3, Sec. 1, Xinyi Rd.
Zhongzheng Dist.
Taipei City, 100012
Taiwan

中華電信股份有限公司
臺灣
台北市
中正區信義路一段 21-3 號
100012

Holds Statement No: GHGEV 768108

Verification opinion statement

As a result of carrying out verification procedures in accordance with ISO 14064-3:2006, it is the opinion of BSI with reasonable assurance that:

- The Greenhouse Gas Emissions with Chunghua Telecom Co., Ltd. for the period from 2021-01-01 to 2021-12-31 was verified, including direct greenhouse gas emissions 17,887.470 tonnes of CO₂ equivalent and indirect greenhouse gas emissions from imported energy 716,979.259 tonnes of CO₂ equivalent.
- Excluding the overseas locations from the boundary of Chunghua Telecom Co., Ltd.
- The purchased electricity emission factor is 0.502 kilograms of carbon dioxide equivalent per kWh, which is released by Bureau of Energy, Ministry of Economic Affairs, Taiwan in 2020.
- No material misstatements for the period from 2021-01-01 to 2021-12-31 Greenhouse Gas Emissions calculation were revealed.
- Data quality was considered acceptable in meeting the principles as set out in ISO 14064-1:2018.

The other selected indirect GHG emissions listed in the attached table on the next page were also reported in accordance with ISO 14064-1:2018 and with reference to the WRI/WBCSD Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard and thus verified with limited assurance, and data quality was not considered unacceptable in meeting the principles as set out in ISO 14064-1: 2018.

For and on behalf of BSI:



Managing Director BSI Taiwan, Peter Pu

Originally Issue: 2022-06-06

Latest Issue: 2022-06-06

Page: 1 of 4

...making excellence a habit.™

The British Standards Institution is independent to the above named client and has no financial interest in the above named client. This Opinion Statement has been prepared for the above named client only for the purposes of verifying its statements relating to its carbon emissions more particularly described in the scope. It was not prepared for any other purpose. The British Standards institution will not, in providing this Opinion Statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used or to any person by whom the Opinion Statement may be read. This Opinion Statement is prepared on the basis of review by The British Standards Institution of information presented to it by the above named client. The review does not extend beyond such information and is solely based on it. In performing such review, The British Standards Institution has assumed that all such information is complete and accurate. Any queries that may arise by virtue of this Opinion Statement or matters relating to it should be addressed to the above name client only.

Taiwan Headquarters: 2nd Floor, No. 37, Ji-Hu Rd., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C.
BSI Taiwan is a subsidiary of British Standards Institution.

Statement No: GHGEV 768108

The aggregate greenhouse gas emissions information across all of Taiwan reported by Chunghwa Telecom Co., Ltd. for the period from 2021-01-01 to 2021-12-31 is listed below:

EMISSIONS		Notes	tonnes CO ₂ e
1. Direct GHG emissions (scope 1)			17,887.470
1.1	Stationary combustion		1831.4284
1.2	Mobile combustion		11,533.0694
1.3	Industrial processes(anthropogenic systems)	N/A	-
1.4	Fugitive(anthropogenic systems)		4,522.9723
1.5	Land use, land use change and forestry	N/A	-
Direct emissions in tonnes of CO ₂ e from biomass			0
2. Indirect GHG emissions from imported energy (scope 2)			716,979.259
2.1	Indirect emissions from imported electricity	location-based approach	716,979.2586
Total emissions from scope 1 & scope 2			734,866.729
3. Indirect GHG emissions from transportation (scope 3)			14,149.1999
3.1	Upstream transportation and distribution		571.0138
3.2	Downstream transportation and distribution		141.8628
3.3	Business travels		4,771.1007
3.4	Employee commuting		8,665.2226
4. Indirect GHG emissions from products used by organization (scope 3)			986,373.6061
4.1	Emissions from purchased goods		466,201.0584
4.2	Capital goods		364,752.9818
4.3	Fuel- and energy-related activities (not included in scope 1 or scope 2)		135,568.0273
4.4	Waste generated in operations	Solid waste only	1,359.3998
4.5	Upstream leased assets		18,492.1388
5. Indirect GHG emissions associated with the use of products from the organization (scope 3)			456,312.5384
5.1	Use of sold products		307,742.3346
5.2	End-of-life treatment of sold products		383.1154
5.3	Downstream leased assets		145,217.4281
5.4	Franchises	Scope 1 emissions (Senao)	2,969.6603

* NS: Non significant.

The emission information was verified in headquarters, business groups, selected branches, and operation sites in Taiwan, and all the greenhouse gas emissions across all of the reporting company's locations are aggregated into Chunghwa Telecom Co., Ltd. as below:

Originally Issue: 2022-06-06

Latest Issue: 2022-06-06

Page: 2 of 4

The British Standards Institution is independent to the above named client and has no financial interest in the above named client. This Opinion Statement has been prepared for the above named client only for the purposes of verifying its statements relating to its carbon emissions more particularly described in the scope. It was not prepared for any other purpose. The British Standards institution will not, in providing this Opinion Statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used or to any person by whom the Opinion Statement may be read. This Opinion Statement is prepared on the basis of review by The British Standards Institution of information presented to it by the above named client. The review does not extend beyond such information and is solely based on it. In performing such review, The British Standards Institution has assumed that all such information is complete and accurate. Any queries that may arise by virtue of this Opinion Statement or matters relating to it should be addressed to the above name client only.

Taiwan Headquarters: 2nd Floor, No. 37, Ji-Hu Rd., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C.
BSI Taiwan is a subsidiary of British Standards Institution.

Location	Verification Information
Chunghwa Telecom Co., Ltd. No. 21-3, Sec. 1, Xinyi Rd. Zhongzheng Dist. Taipei City 100012 Taiwan 中華電信股份有限公司 臺灣 台北市 中正區信義路一段 21-3 號 100012	The Greenhouse Gas Emissions with Chunghwa Telecom Co., Ltd. excluding overseas locations for the period from 2021-01-01 to 2021-12-31 was verified, including direct greenhouse gas emissions 17,887.470 tonnes of CO ₂ equivalent and indirect greenhouse gas emissions from imported energy 716,979.259 tonnes of CO ₂ equivalent.

The greenhouse gas emissions information categorized by GHG Protocol and reported by Chunghwa Telecom Co., Ltd. for FY2021 is as follows:

Category of GHG Protocol		Notes	Emissions (tonnes CO ₂ e)
scope 1		Direct GHG emissions	17,887.470
scope 2		Indirect GHG emissions from imported energy	716,979.259
scope 3		Other indirect GHG emissions	1,456,835.344
Category			
1	Purchased goods & services	Upstream emissions from production of products and services purchased by the reporting company including smart phones, smart watches and other 3C products etc. (estimated use combining EEIO and activity data with LCA emission factors)	466,201.0584
2	Capital goods	Upstream emissions from production of capital goods (tangible and intangible assets) including equipment for IDC, telecommunication etc. (estimated use combining EEIO and activity data with LCA emission factors)	364,752.9818
3	Fuel- and energy-related activities (not included in scope 1 or scope 2)	Upstream emissions related to production of electricity and fuel used by locations of the reporting company (estimated use combining activity data and LCA emission factor- cradle to gate)	135,568.0273
4	Upstream transportation and distribution	Upstream emission related to the transportation and distribution services by suppliers of the reporting company (estimated use spend-based method: GHG Protocol Scope 3 Evaluator-Open IO emissions data)	571.0138
5	Waste generated in operations	Emissions related to the treatment of domestic and industrial solid wastes generated from operations of the reporting company (estimated by activity data with LCA emission factors of incineration treatment)	1,359.3998
6	Business travels	Emissions from the transportation of employees on business (estimated use spend-based method: GHG Protocol Scope 3 Evaluator-WIOD emission factors)	4,771.1007

Originally Issue: 2022-06-06

Latest Issue: 2022-06-06

Page: 3 of 4

The British Standards Institution is independent to the above named client and has no financial interest in the above named client. This Opinion Statement has been prepared for the above named client only for the purposes of verifying its statements relating to its carbon emissions more particularly described in the scope. It was not prepared for any other purpose. The British Standards institution will not, in providing this Opinion Statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used or to any person by whom the Opinion Statement may be read. This Opinion Statement is prepared on the basis of review by The British Standards Institution of information presented to it by the above named client. The review does not extend beyond such information and is solely based on it. In performing such review, The British Standards Institution has assumed that all such information is complete and accurate. Any queries that may arise by virtue of this Opinion Statement or matters relating to it should be addressed to the above name client only.

Taiwan Headquarters: 2nd Floor, No. 37, Ji-Hu Rd., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C.
 BSI Taiwan is a subsidiary of British Standards Institution.

Category of GHG Protocol		Notes	Emissions (tonnes CO ₂ e)
7	Employee commuting	Emissions from the transportation of employees between homes and workplaces (estimate based on employee personnel information and emission factors for each mode of transport)	8,665.2226
8	Upstream leased assets	Emissions form scope 1 & scope 2 emissions in leased asset from suppliers (estimated by collecting the emissions data from individual leased assets)	18,492.1388
9	Downstream transportation and distribution	Emission from the transportation and distribution of products sold by the reporting company (estimated based on spend-based method: GHG Protocol Scope 3 Evaluator-Open IO emissions data)	141.8628
11	Use of sold products	Emissions from use of the products sold by the reporting company including smart phones, smart watches, ICT equipment, MOD set-top boxes etc. (estimated based on product directly energy consumption as well as the quantities of products sold and/or installed)	307,742.3346
12	End-of-life treatment of sold products	Emissions from disposed and treatment of sold products by the reporting company including smart phones, smart watches and other electronic products (estimated use activity data with end-of-life of the product LCA emission factor)	383.1154
13	Downstream leased assets	Emissions from downstream leased assets (estimated use spend-based data: GHG Protocol Scope 3 Evaluator-WIOD emission factors)	145,217.4281
14	Franchises	Emissions from operation of stand-alone franchises (estimated mainly based on the electricity use)	2,969.6603

Originally Issue: 2022-06-06

Latest Issue: 2022-06-06

Page: 4 of 4

The British Standards Institution is independent to the above named client and has no financial interest in the above named client. This Opinion Statement has been prepared for the above named client only for the purposes of verifying its statements relating to its carbon emissions more particularly described in the scope. It was not prepared for any other purpose. The British Standards institution will not, in providing this Opinion Statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used or to any person by whom the Opinion Statement may be read. This Opinion Statement is prepared on the basis of review by The British Standards Institution of information presented to it by the above named client. The review does not extend beyond such information and is solely based on it. In performing such review, The British Standards Institution has assumed that all such information is complete and accurate. Any queries that may arise by virtue of this Opinion Statement or matters relating to it should be addressed to the above name client only.

Taiwan Headquarters: 2nd Floor, No. 37, Ji-Hu Rd., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C.
BSI Taiwan is a subsidiary of British Standards Institution.