



# 温室气体核算与排放报告

授予

## 威海光缆股份有限公司

核查地址 [江苏省南京经济技术开发区新开...]  
 [江苏省南京经济技术开发区齐...]  
 组织边界 中天科技股份有限公...  
 报告边界 中天科技股份有限公...  
 限制 排除其...  
 保证等级 合理保证

证书编号: CN...  
 标准: GB 32163-2015  
 核算与排放范围: 直接排放、间接排放

### 4004-1

经核查, 2023年1月1日至2023年12月31日期间, 威海光缆股份有限公司温室气体直接排放量为 36.1 吨 CO<sub>2</sub>e, 间接排放量为 9,410 吨 CO<sub>2</sub>e。

基准年: 2022

签发日期: 2023年5月9日  
 声明编号: CN...65



BEIJING VERIFICATION CENTER  
Certification

## 温室气体核算与报告 (附件)

中天科... 股份有限公司... 必维... (北京) 有限公司... 告边界...  
内的温... 本排放进行第三... 查... 对该... 活

| 类别         | 排放源  | 设备               | 温室气体            | 数量                     | 单位                       | 备注                    |          |
|------------|------|------------------|-----------------|------------------------|--------------------------|-----------------------|----------|
| 直接温室气体排    | 焊接机  | 焊接机乙炔            | CO <sub>2</sub> | 3.46                   | tCO <sub>2e</sub> /t     | 量平衡方                  |          |
|            |      | 焊接机二氧化碳          | CO <sub>2</sub> |                        | tCO <sub>2e</sub> /t     | 量平衡方                  |          |
|            |      | 烘烤机              | 液化石油气           | CO <sub>2</sub>        | 1.00                     | kgCC <sub>2</sub> /TJ | PCC 200  |
|            |      |                  |                 | CH <sub>4</sub>        | 1                        | kgCH <sub>4</sub> /TJ | PCC 200  |
|            |      |                  |                 | N <sub>2</sub> O       |                          | kgN <sub>2</sub> O/TJ | PCC 200  |
|            |      |                  |                 | CO <sub>2</sub>        | 3.00                     | kgCO <sub>2</sub> /TJ | PCC 200  |
|            |      | 公务用车             | 汽油              | CH <sub>4</sub>        | 4                        | kgCH <sub>4</sub> /TJ | PCC 200e |
|            |      |                  |                 | N <sub>2</sub> O       | 7                        | kgN <sub>2</sub> O/TJ | PCC 200e |
|            |      |                  |                 | CO <sub>2</sub>        | 74.00                    | kgCO <sub>2</sub> /TJ | PCC 200e |
|            |      |                  |                 | CH <sub>4</sub>        | 3.9                      | kgCH <sub>4</sub> /TJ | PCC 200e |
| 货车         | 柴油   | N <sub>2</sub> O | 3.9             | kgN <sub>2</sub> O/TJ  | PCC 200e                 |                       |          |
|            |      | CO <sub>2</sub>  | 74.00           | kgCO <sub>2</sub> /TJ  | PCC 200e                 |                       |          |
|            |      | CH <sub>4</sub>  | 4.13            | kgCH <sub>4</sub> /TJ  | PCC 200e                 |                       |          |
|            |      | N <sub>2</sub> O | 3.5             | kgN <sub>2</sub> O/TJ  | PCC 200e                 |                       |          |
| 叉车         | 柴油   | CO <sub>2</sub>  | 74.00           | kgCO <sub>2</sub> /TJ  | PCC 200e                 |                       |          |
|            |      | CH <sub>4</sub>  | 4.13            | kgCH <sub>4</sub> /TJ  | PCC 200e                 |                       |          |
|            |      | N <sub>2</sub> O | 3.5             | kgN <sub>2</sub> O/TJ  | PCC 200e                 |                       |          |
|            |      | CO <sub>2</sub>  | 74.00           | kgCO <sub>2</sub> /TJ  | PCC 200e                 |                       |          |
| 输入能间接温室气体排 | 外购电力 | CO <sub>2</sub>  | 0.035           | tCO <sub>2e</sub> /MWh | 在中国区域CO <sub>2</sub> 排放区 |                       |          |
|            |      | CO <sub>2</sub>  | 0.105           | tCO <sub>2e</sub> /GJ  | 2022 年全国碳排放权交易配额总量分配实施   |                       |          |

正机构地址：中国北京... 必维... 100738  
也办公室地址：中国上... 必维... 9层 9020  
进一步澄清本声明书的... 必维... 邮编：2...  
查证本声明书之有效状... 必维... 查询... (an 1)



|                             |     |  |      |                                 |   |
|-----------------------------|-----|--|------|---------------------------------|---|
| 运输过程<br>间接温室<br>气体排放        | 道路货 |  | 0.02 | kg CO <sub>2</sub><br>/(ton*km) | 中国产<br>生命周期温室气<br>体排放系数库  |
|                             | 水   |  | 0.02 | kg CO <sub>2</sub><br>/(ton*km) |   |
|                             | 航   |  | 0.02 | kg CO <sub>2</sub><br>/(人*km)   |   |
|                             | 铁   | CO <sub>2</sub> , CH <sub>4</sub> , H <sub>2</sub> O | 0.02 | kg CO <sub>2</sub><br>/(人*km)   |   |
|                             | 汽   |  | 0.02 | kg CO <sub>2</sub><br>/(人*km)   |   |
|                             | 柴   |  | 0.02 | kg CO <sub>2</sub><br>/(人*km)   |   |
|                             |     |  | 0.02 | kg CO <sub>2</sub><br>/(人*km)   |   |
| 组织使用<br>产品的<br>间接温室<br>气体排放 |     | CO <sub>2</sub> , CH <sub>4</sub> , H <sub>2</sub> O | 25   | kg CO <sub>2</sub><br>/吨        | 中国产<br>生命周期温室气<br>体排放系数库  |
|                             |     |  | 0.02 | t CO <sub>2</sub> e/<br>MWh     | UK<br>Government GHG<br>Conversion Factors for<br>Company Reporting |
|                             |     |  | 0.02 | t CO <sub>2</sub> e/<br>MWh     |   |
|                             |     |  | 0.02 | t CO <sub>2</sub> e/<br>MWh     |   |
|                             |     |  | 0.02 | t CO <sub>2</sub> e/<br>MWh     |   |

上述经核查均符合除上述排放源外，其他温室气体排放源经核查不具备经济性和技术可行性。

核查组进行了定性分析，数据品质良好。方法学：样率：10%

核查组长：王文 授权代表：[Signature]

核查日期：2023年4月23-24日 批准日期：2023年5月19日



# Statement of Work for the Calibration of the Submarine

1. **Project Name:** Calibration of the Submarine

2. **Client:** [Client Name]

3. **Project Manager:** [Project Manager Name]

4. **Project Start Date:** [Start Date]

5. **Project End Date:** [End Date]

6. **Project Location:** [Location]

7. **Project Description:** [Detailed description of the project scope, including the calibration of various instruments and equipment used in submarine operations.]

8. **Project Objectives:** [List of specific goals and objectives for the project.]

9. **Project Deliverables:** [List of the final products and services to be provided.]

10. **Project Budget:** [Information regarding the project's financial resources.]

11. **Project Risks:** [Identification of potential risks and mitigation strategies.]

12. **Project Stakeholders:** [List of individuals and organizations involved in the project.]

13. **Project Communication:** [Details on how project progress and issues will be communicated.]

14. **Project Approval:** [Signatures and dates of approval from relevant parties.]

15. **Project Review:** [Information regarding the project's performance and outcomes.]

16. **Project Closure:** [Details on the final steps of the project, including documentation and reporting.]

17. **Project Contact Information:** [Contact details for the project team.]

18. **Project Terms and Conditions:** [Legal and contractual information.]

19. **Project Signatures:** [Signatures of the project manager and client representative.]

20. **Project Date:** [Date of the statement of work.]

21. **Project Reference:** [References to related documents and projects.]

22. **Project Appendix:** [Additional information and data related to the project.]

23. **Project Glossary:** [Definitions of key terms and acronyms used in the document.]

24. **Project Index:** [A list of the document's sections and their page numbers.]

25. **Project Revision History:** [A record of changes made to the document over time.]

26. **Project Change Control:** [A process for managing changes to the project scope and schedule.]

27. **Project Risk Register:** [A table listing identified risks and their status.]

28. **Project Communication Plan:** [A plan for how project information will be shared.]

29. **Project Stakeholder Register:** [A list of stakeholders and their interests.]

30. **Project Quality Management Plan:** [A plan for ensuring the project meets quality standards.]

31. **Project Resource Management Plan:** [A plan for managing the project's human and material resources.]

32. **Project Procurement Management Plan:** [A plan for managing the project's procurement activities.]

33. **Project Risk Management Plan:** [A plan for managing the project's risks.]

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## Greenhouse Gas Verification Statement

Zhongtian Technology Submarine Cable Co., Ltd. has commissioned Bureau of Veritas (Beijing) Certification Co., Ltd. to conduct this verification of greenhouse gas emissions within its reporting boundary.

| Type  | Facility                          | GHG             | Quantity             | Unit                    | Reference   |
|---|-----------------------------------|-----------------|----------------------|-------------------------|---|
| Direct GHG emissions                            | Acetylene of Welding machine      | CO <sub>2</sub> | 846                  | Fac tCO <sub>2</sub> e  | Mass balance method   |
|   | Carbon dioxide of Welding machine | CO <sub>2</sub> | 1                    | tCO <sub>2</sub> e      | Mass balance method   |
|   | LPG of Roaster                    | CO <sub>2</sub> | 100                  | kg CO <sub>2</sub> e    | IPCC 2006   |
|   |                                   | H <sub>4</sub>  | 1                    | kg CH <sub>4</sub>      | IPCC 2006   |
|   |                                   | eO              | 0.1                  | kg N <sub>2</sub> O     | IPCC 2006   |
|   | Gasoline of Car                   | CO <sub>2</sub> | 300                  | kg CO <sub>2</sub> e    | IPCC 2006   |
|   |                                   | H <sub>4</sub>  | 0.8                  | kg CH <sub>4</sub>      | IPCC 2006   |
|   |                                   | eO              | 0.7                  | kg N <sub>2</sub> O     | IPCC 2006   |
|   | Diesel oil of Truck               | CO <sub>2</sub> | 100                  | kg CO <sub>2</sub> e    | IPCC 2006   |
|   |                                   | H <sub>4</sub>  | 0.9                  | kg CH <sub>4</sub>      | IPCC 2006   |
| eO  |                                   | 0.9             | kg N <sub>2</sub> O  | IPCC 2006               |   |
| Diesel oil of Fork cart                         | CO <sub>2</sub>                   | 100             | kg CO <sub>2</sub> e | IPCC 2006               |   |
|   | H <sub>4</sub>                    | 0.15            | kg CH <sub>4</sub>   | IPCC 2006               |   |
|   | eO                                | 0.36            | kg N <sub>2</sub> O  | IPCC 2006               |   |
| Indirect GHG emissions for imported electricity | Power                             | CO <sub>2</sub> | 035                  | ton CO <sub>2</sub> e/M | Average CO <sub>2</sub> emission factors China's regional power grids in 2012 |

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| Indirect emissions: import                   | CO <sub>2</sub>                    | 105  | tonne CO <sub>2</sub> e  | Implementation plan for setting and allocating the total amount of national carbon emission trading rights in 2021-2022 |
|--|------------------------------------|------|--------------------------|---|
| Indirect emissions: transport                | CO <sub>2</sub> /H <sub>4</sub> /t | 074  | kg CO <sub>2</sub> e/kwh | China products carbon footprint factors database  |
|  |                                    | 012  | kg CO <sub>2</sub> e/kwh |   |
|  |                                    | 088  | kg CO <sub>2</sub> e/kwh |   |
|  |                                    | 018  | kg CO <sub>2</sub> e/kwh |   |
|  |                                    | 041  | kg CO <sub>2</sub> e/kwh |   |
|  |                                    | 015  | kg CO <sub>2</sub> e/kwh |   |
|  |                                    | 062  | kg CO <sub>2</sub> e/kwh |   |
| Indirect emissions: products by organization | CO <sub>2</sub> /H <sub>4</sub> /t | 2.29 | kg CO <sub>2</sub> e/n   | China products carbon footprint factors database  |
|  |                                    | 1317 | kg CO <sub>2</sub> e/n   | UK Government GHG Conversion Factors for Company Reporting  |
|  |                                    | 1317 | kg CO <sub>2</sub> e/n   |   |
|  |                                    | 1317 | kg CO <sub>2</sub> e/n   |   |
|  |                                    | 1317 | kg CO <sub>2</sub> e/n   |   |
|  |                                    | 1317 | kg CO <sub>2</sub> e/n   |   |

Above the greenhouse gas emissions are available. Except for the economic analysis, 100% of the data is verified. The verification is based on the company's internal data and the verification is performed by Bureau Veritas.

Verification method: 100%  
Lead verifier's name: [Name]  
Verification date: 2023  
Reported date: 19 May, 2023

Office: Beijing, China  
Address: [Address]  
Phone: +86 21 231 19 [Number]

Implementation plan for setting and allocating the total amount of national carbon emission trading rights in 2021-2022

China products carbon footprint factors database

UK Government GHG Conversion Factors for Company Reporting