

**Organization**  
组织

Yingli Energy Development Co., Ltd.  
No. 2599, North Xiangyang Avenue, Baoding, Hebei, 071051, China  
英利能源发展有限公司  
中国河北省保定市竞秀区向阳北大街 2599 号 071051

**Opinion No.**  
声明号

CFV 814939 30102024

**GHG Statement**  
温室气体声明文件

英利能源发展有限公司 2023 年度的温室气体排放报告、2023 年度温室气体排放清册

**Level of Assurance**  
保证等级

Reasonable  
合理

**Materiality**  
实质性水平

5%

**Reporting Period**  
报告期间

2023 年 1 月 1 日-2023 年 12 月 31 日

**Criteria**  
核查准则

ISO 14064-1:2018

**Carbon Footprint**  
碳足迹

Total 总量 5959752.81 tonnes CO<sub>2</sub>(e) 吨二氧化碳当量

**Conclusion**  
结论**Verified as Satisfactory**

无保留核查意见

Based on the processes and procedures conducted it is concluded that the GHG statement 根据所实施的过程和程序，温室气体声明的结论是：

- is materially correct and is a fair representation of GHG data and information.  
温室气体数据及信息是实质性正确并公正表达
- has been prepared in accordance with ISO 14064-1:2018 and its principles.  
是按 ISO 14064-1:2018 要求及其原则编制

**Lead Verifier**  
核查组长

RIVER ZHAO 赵连河

**Independent Reviewer**  
独立评审员

Shirley Qian 钱韶丽

**Signed on behalf of BSI**  
BSI 代表签署

Michael Lam - Managing Director Assurance, APAC

**Issue Date**  
签署日期

30/10/2024

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## Appendix A Additional Information about the GHG Statement

### 附录 A 温室气体声明的补充信息

Organizational Boundary 组织边界设定	Operational Control 营运控制	
Locations included in the Organizational Boundary 组织边界中包含的位置	No. 2599, North Xiangyang Avenue, Baoding, Hebei, 071051, China 中国河北省保定市竞秀区向阳北大街 2599 号 071051 (000) No. 5, Haihang East Road, Ninghe Modern Industrial Park, Tianjin, 301508, China 中国天津市宁河现代产业园区海航东路 5 号 301508 (001) No. 969, Wei 17 Road, High-tech Zone, Hengshui, Hebei, 053020, China 中国河北省衡水市高新区纬十七路969号 053020 (002) No. 655, Yongsheng North Street, High-tech Industrial Park, Li County, Baoding, Hebei, 071499, China 河北省保定市蠡县经济开发区永盛北大街655号 071499 (003)	
Scope of activities: 活动范围	The manufacture of Crystalline Silicon Solar Modules. 晶体硅太阳能组件的制造。	
Reporting Boundary 报告边界:		tCO <sub>2</sub> (e) 吨二氧化碳当量
Direct GHG Emissions (Scope 1) 直接温室气体排放 (范围 1)	Combustion of natural gas for boiler, Official vehicle gasoline, refrigerant escape, CO <sub>2</sub> fire extinguisher and R143A escape, Anaerobic treatment of sewage station/septic tank methane escape 锅炉用天然气固定燃烧、汽车用汽油移动燃烧、二氧化碳灭火器逸散、制冷机R143A制冷剂逸散、生活污水甲烷逸散	1025.84
Direct GHG Removals (Scope 1) 直接清除温室气体 (范围 1)	NIL	0
Indirect GHG Emissions from imported energy (Scope 2) 输入能源产生的间接温室气体排放 (范围 2)	Purchased power, Purchased heat 购入的电力温室气体排放、购入蒸汽温室气体排放	55408.76
Indirect GHG Emissions from transportation (Scope 3) 交通运输产生的间接温室气体排放 (范围3)	Upstream/Transportation and Distribution - Materials Procurement Transportation, Downstream Transportation and Distribution, Waste transfer via road, Staff commute, Business Travel 上游原辅料的运输排放、下游产品运输的排放、员工通勤温室气体排放、员工差旅温室气体的排放	50702.96
Indirect GHG Emissions from products used by organization (Scope 3) 组织使用的产品产生的间接温室气体排放 (范围3)	Material consumption (solar cell, glass, aluminum, printing paper, adhesive film, solder tape, slipstream, silicone, fluxes), tap water, fixed-asset investment, waste treatment 原材料(电池片、玻璃、铝材、打印纸、胶膜、焊带、汇流带、硅胶、助焊剂)消耗、自来水的温室气体排放、固定资产投资产生的温室气体排放、废物处理产生的温室气体的排放	5,852,615.25
Indirect GHG Emissions associated with the use of products from the organization (Scope 3) 与使用组织产品相关的间接温室气体排放 (范围3)	NIL	
Indirect GHG Emissions from other sources (Scope 3) 其他来源的间接温室气体排放 (范围 3)	NIL	
Total Carbon Footprint 总的碳足迹		5959752.80

温室气体声明组织边界涉及的多场所清单：

总部：

Organizational Boundary 组织边界设定	Operational Control 营运控制	
Locations included in the Organizational Boundary 组织边界中包含的位置	No. 2599, North Xiangyang Avenue, Baoding, Hebei, 071051, China 中国河北省保定市竞秀区向阳北大街 2599 号 071051 (000)	
Scope of activities: 活动范围	The manufacture of Crystalline Silicon Solar Modules. 晶体硅太阳能组件的制造。	
Reporting Boundary 报告边界:		tCO <sub>2</sub> (e) 吨二氧化碳当量
Direct GHG Emissions (Scope 1) 直接温室气体排放 (范围 1)	Combustion of natural gas for boiler, Official vehicle gasoline, Anaerobic treatment of sewage station/septic tank methane escape 锅炉用天然气固定燃烧、汽车用汽油移动燃烧、生活污水甲烷逸散	127.47
Direct GHG Removals (Scope 1) 直接清除温室气体 (范围 1)	NIL	0
Indirect GHG Emissions from imported energy (Scope 2) 输入能源产生的间接温室气体排放 (范围 2)	Purchased power 购入的电力温室气体排放	619.85
Indirect GHG Emissions from transportation (Scope 3) 交通运输产生的间接温室气体排放 (范围 3)	Upstream/ Transportation and Distribution - Materials Procurement Transportation, Downstream Transportation and Distribution, Waste transfer via road, Staff commute, Business Travel 上游原辅料的运输排放、下游产品运输的排放、员工通勤温室气体排放、员工差旅温室气体的排放	50695.06
Indirect GHG Emissions from products used by organization (Scope 3) 组织使用的产品产生的间接温室气体排放 (范围 3)	Material consumption (solar cell, glass, aluminum, printing paper, adhesive film, solder tape, slipstream, silicone, fluxes), tap water, fixed-asset investment, waste treatment 原材料 (电池片、玻璃、铝材、打印纸、胶膜、焊带、汇流带、硅胶、助焊剂) 消耗、自来水的温室气体排放、固定资产投资产生的温室气体排放、废物处理产生的温室气体的排放	5852570.24
Indirect GHG Emissions associated with the use of products from the organization (Scope 3) 与使用组织产品相关的间接温室气体排放 (范围 3)	nil	
Indirect GHG Emissions from other sources (Scope 3) 其他来源的间接温室气体排放 (范围 3)	nil	
Total Carbon Footprint 总的碳足迹		5904012.62

Organizational Boundary 组织边界设定	Operational Control 营运控制	
Locations included in the Organizational Boundary 组织边界中包含的位置	No. 5, Haihang East Road, Ninghe Modern Industrial Park, Tianjin, 301508, China 中国天津市宁河现代产业园区海航东路5号 301508 (001)	
Scope of activities: 活动范围	The manufacture of Crystalline Silicon Solar Modules. 晶体硅太阳能组件的制造。	
Reporting Boundary 报告边界:		tCO <sub>2</sub> (e) 吨二氧化碳当量
Direct GHG Emissions (Scope 1) 直接温室气体排放 (范围 1)	Official vehicle gasoline, Anaerobic treatment of sewage station/septic tank methane escape 汽车用汽油移动燃烧、生活污水甲烷逸散	182.67
Direct GHG Removals (Scope 1) 直接清除温室气体 (范围 1)	NIL	0
Indirect GHG Emissions from imported energy (Scope 2) 输入能源产生的间接温室气体排放 (范围 2)	Purchased power 购入的电力温室气体排放	23,434.62
Indirect GHG Emissions from transportation (Scope 3) 交通运输产生的间接温室气体排放 (范围3)	Staff commute, Business Travel 员工通勤温室气体排放、员工差旅温室气体的排放	4.46
Indirect GHG Emissions from products used by organization (Scope 3) 组织使用的产品产生的间接温室气体排放 (范围3)	Tap water, waste treatment 自来水的温室气体排放、废物处理产生的温室气体的排放	7.90
Indirect GHG Emissions associated with the use of products from the organization (Scope 3) 与使用组织产品相关的间接温室气体排放 (范围3)	NIL	
Indirect GHG Emissions from other sources (Scope 3) 其他来源的间接温室气体排放 (范围 3)	NIL	
Total Carbon Footprint 总的碳足迹		23,629.65

Organizational Boundary 组织边界设定	Operational Control 营运控制	
Locations included in the Organizational Boundary 组织边界中包含的位置	No. 969, Wei 17 Road, High-tech Zone, Hengshui, Hebei, 053020, China 中国 河北省衡水市高新区纬十七路969号 053020 (002)	
Scope of activities: 活动范围	The manufacture of Crystalline Silicon Solar Modules. 晶体硅太阳能组件的制造。	
Reporting Boundary 报告边界:		tCO <sub>2</sub> (e) 吨二氧化碳当量
Direct GHG Emissions (Scope 1) 直接温室气体排放 (范围 1)	Combustion of natural gas for boiler, Official vehicle gasoline, refrigerant escape, CO <sub>2</sub> fire extinguisher escape, Anaerobic treatment of sewage station/septic tank methane escape 锅炉用天然气固定燃烧、汽车用汽油移动燃烧、二氧化碳灭火器逸散生活污水甲烷逸散	41.81
Direct GHG Removals (Scope 1) 直接清除温室气体 (范围 1)	NIL	0
Indirect GHG Emissions from imported energy (Scope 2) 输入能源产生的间接温室气体排放 (范围 2)	Purchased power 购入的电力温室气体排放	12362.69
Indirect GHG Emissions from transportation (Scope 3) 交通运输产生的间接温室气体排放 (范围3)	Staff commute, Business Travel 员工通勤温室气体排放、员工差旅温室气体的排放	1.92
Indirect GHG Emissions from products used by organization (Scope 3) 组织使用的产品产生的间接温室气体排放 (范围3)	Tap water, waste treatment 自来水的温室气体排放、废物处理产生的温室气体的排放	23.71
Indirect GHG Emissions associated with the use of products from the organization (Scope 3) 与使用组织产品相关的间接温室气体排放 (范围3)	NIL	
Indirect GHG Emissions from other sources (Scope 3) 其他来源的间接温室气体排放 (范围 3)	NIL	
Total Carbon Footprint 总的碳足迹		12,430.13

Organizational Boundary 组织边界设定	Operational Control 营运控制	
Locations included in the Organizational Boundary 组织边界中包含的位置	No. 655, Yongsheng North Street, High-tech Industrial Park, Li County, Baoding, Hebei, 071499, China 河北省保定市蠡县经济开发区永盛北大街 655 号 071499 (003)	
Scope of activities: 活动范围	The manufacture of Crystalline Silicon Solar Modules. 晶体硅太阳能组件的制造。	
Reporting Boundary 报告边界:		tCO <sub>2</sub> (e) 吨二氧化碳当量
Direct GHG Emissions (Scope 1) 直接温室气体排放 (范围 1)	Official vehicle gasoline, refrigerant R143A escape, Anaerobic treatment of sewage station/septic tank methane escape 汽车用汽油移动燃烧、制冷机R143A制冷剂逸散、生活污水甲烷逸散	673.89
Direct GHG Removals (Scope 1) 直接清除温室气体 (范围 1)	NIL	0
Indirect GHG Emissions from imported energy (Scope 2) 输入能源产生的间接温室气体排放 (范围 2)	Purchased power, Purchased heat 购入的电力温室气体排放、购入蒸汽温室气体排放	18,991.61
Indirect GHG Emissions from transportation (Scope 3) 交通运输产生的间接温室气体排放 (范围3)	Staff commute, Business Travel 员工通勤温室气体排放、员工差旅温室气体的排放	1.51
Indirect GHG Emissions from products used by organization (Scope 3) 组织使用的产品产生的间接温室气体排放 (范围3)	Tap water 外购自来水的温室气体排放	13.39
Indirect GHG Emissions associated with the use of products from the organization (Scope 3) 与使用组织产品相关的间接温室气体排放 (范围3)	NIL	
Indirect GHG Emissions from other sources (Scope 3) 其他来源的间接温室气体排放 (范围 3)	NIL	
Total Carbon Footprint 总的碳足迹		19,680.40

## Appendix B Additional information about the Assurance Engagement

### 附录 B 有关鉴证业务的补充信息

Verification Objectives 核查目标	To express an opinion on whether the GHG Statement which is historical in nature 就历史性的温室气体声明是否： <ul style="list-style-type: none"><li>• Is accurate, materially correct and is a fair representation of GHG data and information 温室气体数据和信息的表述是否准确、在实质性上正确并公正表达</li><li>• Has been prepared in accordance with ISO 14064-1:2018, the criteria used by BSI to verify the GHG Organizational Statement 是否已按照 BSI 用于核查温室气体组织声明的标准 ISO 14064-1:2018 进行准备</li></ul>
Verification evidence gathering procedures 核查证据收集程序	<ul style="list-style-type: none"><li>• Evaluation of the monitoring and controls systems through interviewing employees observation &amp; inquiry 通过与员工面谈、观察和询问来评估监控系统</li><li>• Verification of the data through sampling, recalculation, retracing, cross checking and reconciliation 通过抽样、重新计算、回溯、交叉检查和核对来验证数据</li></ul>
Verification Standards 核查标准	The verification was carried out in accordance with ISO 14064-3:2019 and ISO 14065:2020 核查按照 ISO 14064-3:2019 和 ISO 14065:2020 进行

Note: Yingli Energy Development Co., Ltd. is responsible for the preparation and fair presentation of the GHG statement and report in accordance with the agreed criteria. BSI is responsible for expressing an opinion on the GHG statement based on the verification.  
注：英利能源发展有限公司负责按照商定的标准编制和公正表达温室气体声明和报告。BSI 负责在核查的基础上对温室气体声明发表意见。