



經濟部標準檢驗局

溫室氣體查證證明

ISO 14064-1
BSMI

勝一化工股份有限公司

高雄市永安區永工一路5號

甲醛系列(福馬林、醇醛混合物、尿素甲醛樹脂、美耐皿醛樹脂、硬化劑)、
工業級有機溶劑(醋酸酯類、醚醇酯類)、電子級各種有機溶劑、有機酸
生產之相關溫室氣體排放及移除之活動

查 證 聲 明

標準檢驗局依據 ISO 14064-3/CNS 14064-3 執行查證程序，已鑑別組織溫室氣體主張，並依雙方協議之查證範圍、目標及準則辦理查證，查證聲明如下：

1. 查證範圍：

「甲醛系列(福馬林、醇醛混合物、尿素甲醛樹脂、美耐皿醛樹脂、硬化劑)、
工業級有機溶劑(醋酸酯類、醚醇酯類)、電子級各種有機溶劑、有機酸」生產相關溫
室氣體排放及移除之活動(高雄市永安區永工一路5號)

2. 保證等級：合理保證等級

3. 查證準則：ISO 14064-1/CNS 14064-1 及溫室氣體盤查議定書－企業會計與報告標準(第
2版)

4. 查證技術：標準檢驗局查證作業採行書面審查、赴廠訪談、兩階段查證等方式，抽樣查
證組織範圍內具充分代表性之主要重大排放源，並運用系統化查證程序確認溫室氣體
資訊及相關溫室氣體主張

5. 實質性門檻：5%

6. 查證意見：依據標準檢驗局溫室氣體查證執行的過程，未發現溫室氣體主張存在實質差
異，溫室氣體報告已依 ISO 14064-1/CNS 14064-1 製備，且適當展現溫室氣體數據與資
訊，查證結果符合查證準則

7. 涵蓋期間：99年1月1日至99年12月31日

8. 排放資訊：總排放量 **34,856** 公噸二氧化碳當量

(範疇一：**29,862** 公噸二氧化碳當量；範疇二：**4,994** 公噸二氧化碳當量)

核發日期：中華民國 101 年 7 月 23 日

證書編號：7XEG005-2010

局長 陳 介 山



Greenhouse Gases
GHG 01



THE BUREAU OF STANDARDS, METROLOGY AND INSPECTION (BSMI),
MINISTRY OF ECONOMIC AFFAIRS, TAIWAN, R.O.C



GREENHOUSE GAS VERIFICATION STATEMENT

SHINY CHEMICAL INDUSTRIAL CO., LTD.

(5, YEONG GONG 1ST ROAD, YEONG AN DISTRICT, KAOHSIUNG CITY, TAIWAN, R.O.C.)

The Related Activities of GHG Emissions and Removals for the production of Formaldehyde (formalin, formcell, urea-and melamine-formaldehyde resin, hardener), *various kinds of Organic Solvents in industrial grade(acetate, glycol ether ester, glycol ether), electronic grade Organic Solvents and Organic Acids*

Verification Statement

The BSMI has performed the verification according to ISO 14064-3, 2006, identified the organization's GHG assertion, and conducted the verification in accordance with agreed verification scope, objectives and criteria. The verification statement:

1. Verification Scope:

The Related Activities of GHG Emissions and Removals for the production of Formaldehyde (formalin, formcell, urea-and melamine-formaldehyde resin, hardener), various kinds of Organic Solvents in industrial grade(acetate, glycol ether ester, glycol ether), electronic grade Organic Solvents and Organic Acids (5, YEONG GONG 1ST ROAD, YEONG AN DISTRICT, KAOHSIUNG CITY, TAIWAN, R.O.C.)

2. Level of Assurance: Reasonable Level of Assurance

3. Verification Criteria: ISO 14064-1:2006 and GHG Protocol-A Corporate Accounting and Reporting Standard (Revised Edition)

4. Verification Skills: The BSMI has conducted the verification through document reviews, pre-visit, two stages of verifications by sampling the principal GHG sources in accordance with systematic verification procedures to confirm the GHG information and associated GHG assertion.

5. Materiality Threshold: 5%

6. Verification Opinion: Based on the process of GHG verification conducted by the BSMI, no material discrepancy was revealed. GHG report was prepared in accordance with ISO 14064-1:2006 and GHG data/information was disclosed appropriately and was represented. The GHG information system and data quality was considered acceptable in meeting the verification criteria.

7. Reporting Period Covered: January 1, 2010 to December 31, 2010.

8. GHG Emission: The GHG emission for the year 2010 is **34,856** tons of CO₂ Equivalent.
(Scope 1: **29,862** tons of CO₂ Equivalent, Scope 2: **4,994** tons of CO₂ Equivalent).

Date of Approval: July 23, 2011
Certificate No:7XEG005-2010

Jay-san Chen



Greenhouse Gases
GHG 01

Jay-san Chen, Ph.D.
Director General of the BSMI

This statement is valid only when used in complete set, including the appendix, in its original copy. Further clarification regarding the contents of the verification statement may be obtained by consulting:

the BSMI: 4, Chinan Road, Sec.1, Taipei 10051, Taiwan, R.O.C. Tel:02-23431805 ; e-mail : iso.service@bsmi.gov.tw
SHINY CHEMICAL INDUSTRIAL CO. LTD. Tel:07-6219171*713



經濟部標準檢驗局

溫室氣體查證證明



勝一化工股份有限公司永安二廠

高雄市永安區永工一路 18 號

工業級及電子級有機溶劑(醚醇類)生產之相關溫室氣體排放及移除之活動

查 證 聲 明

標準檢驗局依據 ISO 14064-3/CNS 14064-3 執行查證程序，已鑑別組織溫室氣體主張，並依雙方協議之查證範圍、目標及準則辦理查證，查證聲明如下：

1. 查證範圍：
「工業級及電子級有機溶劑(醚醇類)」生產相關溫室氣體排放及移除之活動(高雄市永安區永工一路 18 號)
2. 保證等級：合理保證等級
3. 查證準則：ISO 14064-1/CNS 14064-1 及溫室氣體盤查議定書－企業會計與報告標準(第 2 版)
4. 查證技術：標準檢驗局查證作業採行書面審查、赴廠訪談、兩階段查證等方式，抽樣查證組織範圍內具充分代表性之主要重大排放源，並運用系統化查證程序確認溫室氣體資訊及相關溫室氣體主張
5. 實質性門檻：5%
6. 查證意見：依據標準檢驗局溫室氣體查證執行的過程，未發現溫室氣體主張存在實質差異，溫室氣體報告已依 ISO 14064-1/CNS 14064-1 製備，且適當展現溫室氣體數據與資訊，查證結果符合查證準則
7. 涵蓋期間：99 年 1 月 1 日至 99 年 12 月 31 日
8. 排放資訊：總排放量 17,127 公噸二氧化碳當量
(範疇一：14,341 公噸二氧化碳當量；範疇二：2,786 公噸二氧化碳當量)

核發日期:中華民國 101 年 7 月 23 日

證書編號: 7XEG006-2010

局長 陳 介 山



Greenhouse Gases
GHG 01



THE BUREAU OF STANDARDS, METROLOGY AND INSPECTION (BSMI),
MINISTRY OF ECONOMIC AFFAIRS, TAIWAN, R.O.C



GREENHOUSE GAS VERIFICATION STATEMENT

SHINY CHEMICAL INDUSTRIAL CO., LTD. NO.2 PLANT
(18, YEONG GONG 1ST ROAD, YEONG AN DISTRICT, KAOHSIUNG CITY, TAIWAN, R.O.C.)

The Related Activities of GHG Emissions and Removals for the production of industrial grade and electronic grade Organic Solvents (glycol ether)

Verification Statement

The BSMI has performed the verification according to ISO 14064-3, 2006, identified the organization's GHG assertion, and conducted the verification in accordance with agreed verification scope, objectives and criteria. The verification statement:

1. **Verification Scope:**
The Related Activities of GHG Emissions and Removals for the production of industrial grade and electronic grade Organic Solvents (glycol ether) (18, YEONG GONG 1ST ROAD, YEONG AN DISTRICT, KAOHSIUNG CITY, TAIWAN, R.O.C.)
2. **Level of Assurance:** Reasonable Level of Assurance
3. **Verification Criteria:** ISO 14064-1:2006 and GHG Protocol-A Corporate Accounting and Reporting Standard (Revised Edition)
4. **Verification Skills:** The BSMI has conducted the verification through document reviews, pre-visit, two stages of verifications by sampling the principal GHG sources in accordance with systematic verification procedures to confirm the GHG information and associated GHG assertion.
5. **Materiality Threshold:** 5%
6. **Verification Opinion:** Based on the process of GHG verification conducted by the BSMI, no material discrepancy was revealed. GHG report was prepared in accordance with ISO 14064-1:2006 and GHG data/information was disclosed appropriately and was represented. The GHG information system and data quality was considered acceptable in meeting the verification criteria.
7. **Reporting Period Covered:** January 1, 2010 to December 31, 2010.
8. **GHG Emission:** The GHG emission for the year 2010 is **17,127** tons of CO₂ Equivalent.
(**Scope 1:** **14,341** tons of CO₂ Equivalent, **Scope 2:** **2,786** tons of CO₂ Equivalent).

Date of Approval: July 23, 2011
Certificate No:7XEG006-2010

Jay-san Chen, Ph.D.
Director General of the BSMI



Greenhouse Gases
GHG 01



經濟部標準檢驗局

溫室氣體查證證明



勝一化工股份有限公司前鎮廠

高雄市前鎮區立業街2號

液體儲槽租賃服務：各種有機溶劑和有機酸進出口儲存
之相關溫室氣體排放及移除之活動

查 證 聲 明

標準檢驗局依據 ISO 14064-3/CNS 14064-3 執行查證程序，已鑑別組織溫室氣體主張，並依雙方協議之查證範圍、目標及準則辦理查證，查證聲明如下：

1. 查證範圍：

「液體儲槽租賃服務：各種有機溶劑和有機酸進出口儲存」相關溫室氣體排放及移除之活動(高雄市前鎮區立業街2號)

2. 保證等級：合理保證等級

3. 查證準則：ISO 14064-1/CNS 14064-1 及溫室氣體盤查議定書－企業會計與報告標準(第2版)

4. 查證技術：標準檢驗局查證作業採行書面審查、赴廠訪談、兩階段查證等方式，抽樣查證組織範圍內具充分代表性之主要重大排放源，並運用系統化查證程序確認溫室氣體資訊及相關溫室氣體主張

5. 實質性門檻：5%

6. 查證意見：依據標準檢驗局溫室氣體查證執行的過程，未發現溫室氣體主張存在實質差異，溫室氣體報告已依 ISO 14064-1/CNS 14064-1 製備，且適當展現溫室氣體數據與資訊，查證結果符合查證準則

7. 涵蓋期間：99年1月1日至99年12月31日

8. 排放資訊：總排放量 165 公噸二氧化碳當量

(範疇一：4 公噸二氧化碳當量；範疇二：161 公噸二氧化碳當量)

核發日期：中華民國 101 年 7 月 23 日

證書編號：7XEG007-2010

局長 陳 介 山



Greenhouse Gases
GHG 01



THE BUREAU OF STANDARDS, METROLOGY AND INSPECTION (BSMI),
MINISTRY OF ECONOMIC AFFAIRS, TAIWAN, R.O.C



GREENHOUSE GAS VERIFICATION STATEMENT

SHINY CHEMICAL INDUSTRIAL CO., LTD. CHIEN CHEN FACTORY

(2,LIYE ST., CIANJHEN DIST., KAOHSIUNG CITY 80672, TAIWAN, R.O.C.)

The Related Activities of GHG Emissions and Removals of rental business of liquid storage tanks: export storage and import storage in Organic Solvents and Organic Acids

Verification Statement

The BSMI has performed the verification according to ISO 14064-3, 2006, identified the organization's GHG assertion, and conducted the verification in accordance with agreed verification scope, objectives and criteria. The verification statement:

1. **Verification Scope:**
The Related Activities of GHG Emissions and Removals of rental business of liquid storage tanks: export storage and import storage in Organic Solvents and Organic Acids (2,LIYE ST., CIANJHEN DIST., KAOHSIUNG CITY 80672, TAIWAN, R.O.C.)
2. **Level of Assurance:** Reasonable Level of Assurance
3. **Verification Criteria:** ISO 14064-1:2006 and GHG Protocol-A Corporate Accounting and Reporting Standard (Revised Edition)
4. **Verification Skills:** The BSMI has conducted the verification through document reviews, pre-visit, two stages of verifications by sampling the principal GHG sources in accordance with systematic verification procedures to confirm the GHG information and associated GHG assertion.
5. **Materiality Threshold:** 5%
6. **Verification Opinion:** Based on the process of GHG verification conducted by the BSMI, no material discrepancy was revealed. GHG report was prepared in accordance with ISO 14064-1:2006 and GHG data/information was disclosed appropriately and was represented. The GHG information system and data quality was considered acceptable in meeting the verification criteria.
7. **Reporting Period Covered:** January 1, 2010 to December 31, 2010.
8. **GHG Emission:** The GHG emission for the year 2010 is **165** tons of CO₂ Equivalent.
(**Scope 1:** **4** tons of CO₂ Equivalent, **Scope 2:** **161** tons of CO₂ Equivalent).

Date of Approval: July 23, 2011

Certificate No:7XEG007-2010

Jay-san Chen, Ph.D.
Director General of the BSMI



Greenhouse Gases
GHG 01