

# GREENWAY 奈米除碳產品簡介

以奈米技術為核心，為車後市場帶來革命性的引擎保養解決方案。

[www.greenway.tw](http://www.greenway.tw)

# 主要商品



核心產品

專利產品

## GREENWAY 奈米除 碳機組

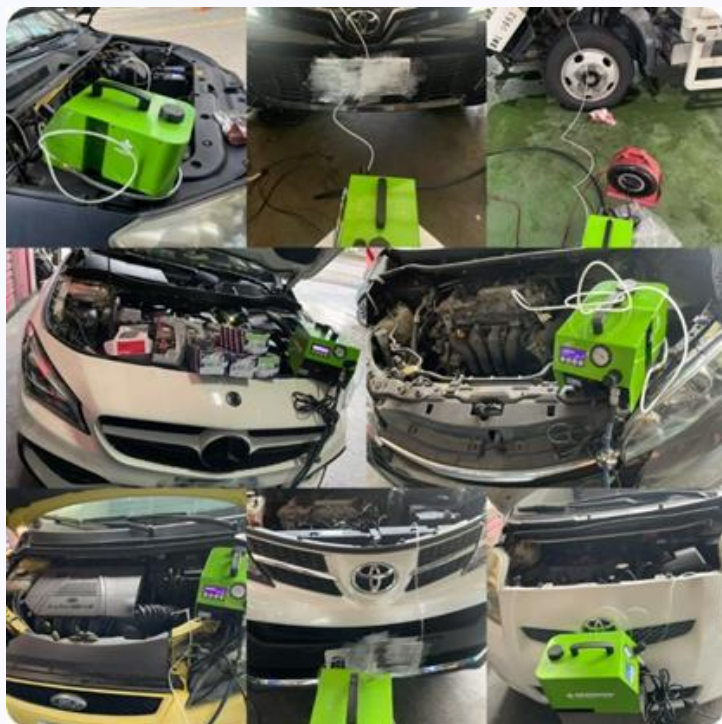
全台約 **600** 家配合保修廠，並導入新焦點麗車坊汽車百貨全通路及耐途耐汽車保修部分通路。中華民國新型專利 第 M646580 號，並已投保兆豐產險，品質與安全雙重保障。



## GREENWAY DPF / 觸媒保養劑

# 公司實績

GREENWAY 奈米除碳機組自推出以來廣受好評，在車後市場掀起奈米除碳風潮，為保養廠與消費者創造雙贏局面。



600+

全台合作保修廠

覆蓋全台主要汽車保養據點

2

大型連鎖通路

新焦點麗車坊全通路、耐途耐部分通路

1

新型專利

第 M646580 號，技術領先業界

# SGS 歐盟 REACH 認證

國際認證

## 通過歐盟嚴格化學品安全標準

GREENWAY 產品通過 SGS 檢驗，符合歐盟 REACH 法規要求，確保產品不含危害人體及環境的化學物質。

SGS 國際第三方檢驗

全球公信力最高的檢驗機構

REACH 法規完全符合

歐盟化學品註冊、評估、授權規範



**測試報告**  
**Test Report**

號碼(No.): ETR24904599M01 日期(Date): 25-Nov-2024 頁數(Page): 2 of 19

請洽國際有限公司 (SERRENO INTERNATIONAL LIMITED COMPANY)  
新北市林口區信義路277號13樓之1 (13 F.-1, NO. 277, XINYI RD., LINKOU DIST., NEW TAIPEI CITY 24453, TAIWAN (R.O.C.))

**測試部位敘述 (Test Part Description)**  
No.1 : 透明液體 (TRANSPARENT LIQUID)

**測試方法 (Test Method)**  
參考RST5-EE-SVHC-007，以標準混合電漿雷射光譜儀、紫外光-可見光分光光度計、氣相層析儀/質譜儀、液相層析儀/質譜儀、氣相層析儀/大氣光度檢測器、液相層析儀/二極體陣列檢測器、液相層析儀/串聯質量譜儀分析。(With reference to RST5-EE-SVHC-007, analysis was performed by ICP-OES, UV-VIS, GC/MS, LC/MS, GC/FPD, LC/DAD, LC/MS/MS.)

**測試結果 (Test Results)** 單位 (Unit): %  
高關注物質(SVHC)候選清單 Candidate List of SVHC (2024/11/07)

| 物質名稱<br>(Substance Name)                                | RL | 濃度<br>(Concentration)<br>No.1 | 限值<br>(Limit) |
|---------------------------------------------------------|----|-------------------------------|---------------|
| 所有高關注物質(SVHC)候選清單測試 (All tested SVHC in candidate list) | -  | n.d.                          | 0.1           |

**Remark :**

- 高關注物質(SVHC)候選清單 Candidate List of SVHC (2024/11/07)  
<https://echa.europa.eu/web/guest/candidate-list-table>
- 根據Regulation (EC) No 1907/2006 中第57條第2項之規定，如果物質含有第57條第2項之標準以及可能違反第59(1)條之規定，則必須符合下列兩種狀況：任何成品之製造人或進口人應向歐洲化學署提供(CHA)通報：
  - (a) 成品中所含物質每年超過1公噸。
  - (b) 依重量百分比計算，物質濃度超過0.1%。
 In accordance with Regulation (EC) No 1907/2006, any producer or importer of articles shall notify ECHA, in accordance with paragraph 2 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation.
- Regulation (EC) No 1907/2006 中第 33 條要求成品供應商，其成品所含物質符合第57條之標準並附第59(1)條之標準確定其濃度大於0.1wt%。應提供成品受表者充分可取得資訊，以確保成品之安全使用(至少包括物質的名稱)。  
Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.

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SGS Taiwan Ltd. 台灣檢驗科技股份有限公司  
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25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan  
Member of the SGS Group



**測試報告**  
**Test Report**

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以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by the applicant as):

送樣廠商(Sample Submitted By) : 請洽國際有限公司 (SERRENO INTERNATIONAL LIMITED COMPANY)  
樣品名稱(Sample Name) : GREENWAY (異味除碳藥劑)

收件日(Sample Receiving Date) : 25-Sep-2024  
測試期間(Testing Period) : 25-Sep-2024 to 04-Oct-2024

**測試需求 (Test Requested)**  
依據客戶指定，參考REACH之Regulation (EC) No 1907/2006的公告進行以下測試 (As specified by client, the sample(s) was/were tested with reference to Regulation (EC) No 1907/2006 concerning the REACH.)  
242項高關注物質候選清單，於2024年11月7日公告 (242 Substances of Very High Concern (SVHC). Candidate list is published on November 7, 2024)

**測試結果 (Test Results)**  
請參閱下一頁 (Please refer to following pages)  
根據歐洲化學署對REACH法規下高關注物質候選清單以及警告範圍和分析技術，依據樣品中所選擇的零組件成分的濃度與物質(SVHC)測試結果濃度均 ≤ 0.1%(w/w) (According to the ruling of the Court of Justice of the European Union on the definition of an article under REACH, and the specified scope as well as analytical technique, the test results of the selected component article are ≤ 0.1% (w/w) in the submitted sample(s).)

**總結 (Summary)**  
請參閱下一頁 (Please refer to following pages)

*Troy Chang / Department Manager*  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei




FN CODE: 1109472

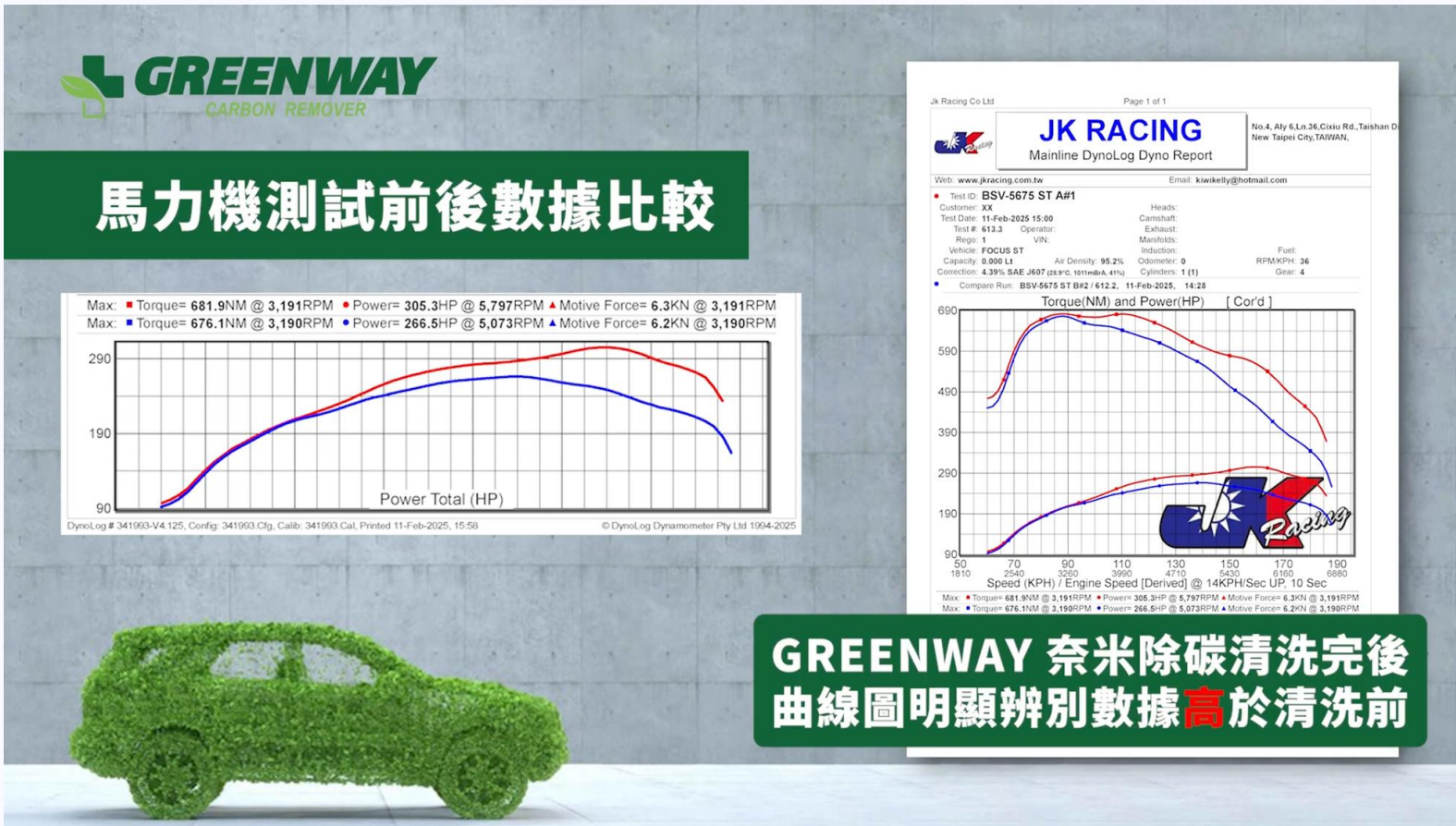
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# 馬力機測試前後數據比較



經 GREENWAY 奈米除碳清洗後，馬力機測試曲線明顯提升，動力輸出數據顯著優於清洗前，效果具體可量化。



## ● 清洗前

積碳影響燃燒效率，馬力輸出受限

## ● 清洗後

曲線明顯提升，動力恢復原廠水準

☐ 測試數據由專業馬力機量測，結果客觀可重複驗證。

# PICO 示波器測試

透過 PICO 汽車示波器進行精密感測器數據分析，客觀呈現奈米除碳前後引擎運作狀態的差異。



# 五大核心部位一次完成



## GREENWAY奈米除碳

6分鐘深度除碳，一次潔淨五大核心部位

節氣門 | 進氣歧管 | 進氣閥門 | 燃燒室 | 觸媒



改善燃燒效率  
提升動力輸出



降低排放  
幫助 DPF 再生



節省燃油  
降低油耗成本



減少維修  
延長引擎壽命



### 為什麼要除碳？

引擎長期運轉會產生積碳，導致燃燒不完全、油耗增加、排放變差，甚至觸發故障碼，影響車輛性能與可靠性。

定期除碳 = 降低風險 × 提升客戶滿意度

- ✓ 提高車輛性能與油耗表現
- ✓ 降低故障率與回廠頻率
- ✓ 提升客戶信任與忠誠度

### 常見故障碼與使用 GREENWAY 奈米除碳之效益

| 故障碼                       | 原因                                     | 使用 GREENWAY 奈米除碳                             |
|---------------------------|----------------------------------------|----------------------------------------------|
| P2002 / P2463<br>(柴油 DPF) | 碳煙生成量過高、EGR 進氣積碳、燃燒效率下降、噴油霧化不佳         | 改善燃燒效率、降低碳煙產生速度，幫助 DPF 再生並減少負擔               |
| P0420 / P0430<br>(觸媒效率)   | 積碳、燃燒不完全、混合比偏差、觸媒表面積碳堆積；觸媒老化也可能是觸媒本體老化 | 若積因在燃燒與積碳，有機會改善排放數值與觸媒判定結果；若觸媒已中毒或熔毀，仍需更換    |
| P0171<br>(混合比過稀)          | 進氣漏氣、MAF 污染、噴油嘴積碳、節氣門與進氣積碳等            | 當開關與進氣/燃燒積碳或 MAF 污染有關係時，常能改善 Fuel Trim 與怠速表現 |

### GREENWAY 奈米除碳的優勢



奈米級配方  
深入清潔積碳



安全溫和  
不傷引擎零件



快速有效  
施工時間短



環保配方  
友善環境



專業設備  
穩定可靠

 選擇 GREENWAY，讓您的客戶車輛更有感，讓您的服務更有價值！

免拆卸無風險

降低工時提升效率

高回報率

立即有感

# 成功案例：新焦點麗車坊

新焦點麗車坊汽車百貨全通路指定使用 GREENWAY 奈米除碳機組，以實際數據驗證商業價值。

6000

年均清洗台數

全台門市合計年度服務量

720萬

年均淨利貢獻

為通路創造可觀的保養營收

100%

全通路導入

麗車坊所有據點全面採用



國際佈局

# 外銷實績

GREENWAY 奈米除碳技術已拓展至新加坡、越南、馬來西亞等東南亞市場，  
以國際認證品質贏得海外合作夥伴信賴。

# 外銷實績 – 新加坡

## ANNEX B

### Revised Vehicular Emissions Scheme (VES) Rebates

VES Schedule from 1 January 2024 to 31 December 2024 (changes in red)

| Band | Rebate/Surcharge (+/-) for Cars | Rebate/Surcharge (+/-) for Taxis |
|------|---------------------------------|----------------------------------|
| A1   | -\$25,000                       | -\$37,500                        |
| A2   | -\$5,000                        | -\$7,500                         |
| B    | -                               | -                                |
| C1   | +\$15,000                       | +\$22,500                        |
| C2   | +\$25,000                       | +\$37,500                        |

VES Schedule from 1 January 2025 to 31 December 2025

| Band | Rebate/Surcharge (+/-) for Cars | Rebate/Surcharge (+/-) for Taxis |
|------|---------------------------------|----------------------------------|
| A1   | TBC*                            | TBC*                             |
| A2   | TBC*                            | TBC*                             |
| B    | -                               | -                                |
| C1   | +\$15,000                       | +\$22,500                        |
| C2   | +\$25,000                       | +\$37,500                        |

\* The rebates, if any, from 1 January 2025 to 31 December 2025 will be announced in 2024.

VES Pollutant Thresholds from 1 January 2024 to 31 December 2025

| Band | VES Pollutant Thresholds |                     |                        |                        |                            |
|------|--------------------------|---------------------|------------------------|------------------------|----------------------------|
|      | Carbon Dioxide (g/km)    | Hydrocarbons (g/km) | Carbon Monoxide (g/km) | Nitrogen Oxides (g/km) | Particulate Matter (mg/km) |
| A1   | ≤90                      | ≤0                  | ≤0                     | ≤0                     | ≤0.0                       |
| A2   | ≤120                     | ≤0.024              | ≤0.19                  | ≤0.009                 | ≤0.3                       |
| B    | ≤159                     | ≤0.029              | ≤0.27                  | ≤0.018                 | ≤0.4                       |
| C1   | ≤182                     | ≤0.040              | ≤0.35                  | ≤0.022                 | ≤1.0                       |
| C2   | >182                     | >0.040              | >0.35                  | >0.022                 | >1.0                       |

## TEST RESULT

|                      | CO (mg/km) | NMHC (mg/km) | NOx (mg/km) | PM (mg/km) | PN (#/km)            |
|----------------------|------------|--------------|-------------|------------|----------------------|
| Emitted Mass         | 45         | 10           | 6           | 0.3        | 4.8x10 <sup>11</sup> |
| Deterioration Factor |            | 1.000        |             |            |                      |
| Result               | 45         | 10           | 6           | 0.3        | 4.8x10 <sup>11</sup> |
| Limit Value          | 1150       | 100          | 50          | NA         | NA                   |
| Individual Result    | P          | P            | P           | NA         | NA                   |

The compliance statement is based on binary decision rule, utilizing simple acceptance criteria.

## Measured Value

|                  | Fuel Consumption (km/L) | CO2 Emission (g/km) |
|------------------|-------------------------|---------------------|
| Low Cycle        | 31.5                    | 72                  |
| Medium Cycle     | 32.2                    | 71                  |
| High Cycle       | 24.3                    | 94                  |
| Extra High Cycle | NA                      | NA                  |
| Combined Cycle   | 27.7                    | 82                  |

diside and fuel consumption are based on the lowest tested results available from the system for similar make

新加坡合作夥伴

## Advanced Autowerkz

新加坡知名汽車貿易商及歐系車保養廠，為因應當地嚴苛的歐盟六期空污法規，指定採用 GREENWAY 奈米除碳機組。

🌿 穩定獲利又環保

符合法規同時提升服務競爭力

💰 政府退稅 5,000 新幣

獲新加坡政府 A2 等級環保補貼



# 外銷實績 – 越南 / 馬來西亞

GREENWAY 技術持續拓展東南亞市場，服務據點涵蓋越南、馬來西亞新山及吉隆坡，產品不只清潔燃燒室，觸媒系統亦可同步保養。

## 越南

拓展當地車後保養市場，提供奈米除碳專業服務

## 馬來西亞 新山

緊鄰新加坡，同步導入奈米除碳技術



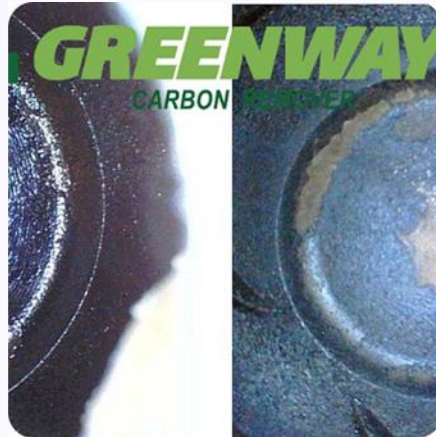
## 馬來西亞 吉隆坡

首都核心市場，建立品牌示範據點

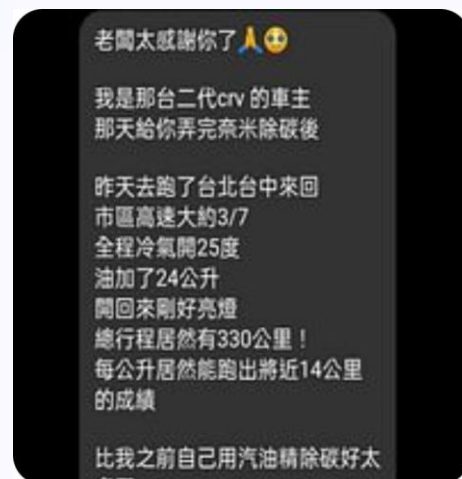


 **技術亮點：**GREENWAY 奈米除碳不只深入清潔燃燒室，更能同步保養觸媒轉換器，全面恢復引擎效能。

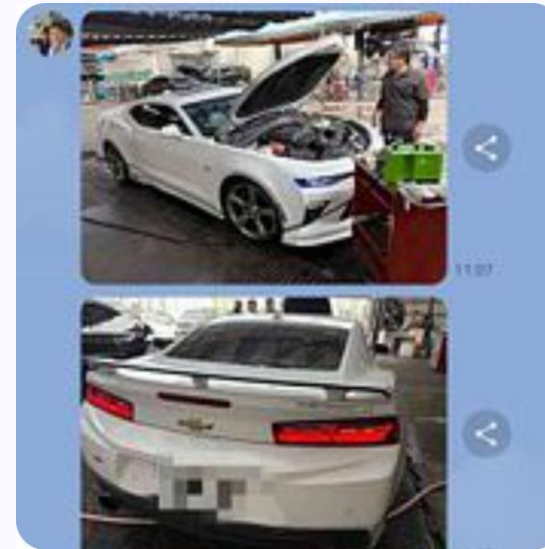
# Before /After



# 保養廠回饋



# 保養廠回饋



# 保養廠回饋



# THANK YOU

*Any **questions** ?*