

26<sup>th</sup> November 2025

# FGR secures exclusive global graphene carbon paste production and sale rights

## Highlights

- First Graphene enters exclusive agreement to develop, produce, market and sell graphene-based carbon paste products with Halocell Australia
- Carbon paste is a conductive coating used to improve performance across a range of flexible printed electronics, energy generation and storage devices
- Market-ready product already used in perovskite solar cells manufactured by Halocell and has a wide array of common applications

First Graphene Limited (ASX:FGR; “First Graphene” or “the Company”) is pleased to announce it has entered an exclusive Licence Agreement (“Agreement”) with Halocell Australia (“Halocell”) to manufacture, market and sell graphene enhanced carbon paste.

The 12-month Agreement gives First Graphene global exclusivity over development and sale of the PureGRAPH<sup>®</sup> containing product, with Halocell receiving a 10% royalty on sales as well as using the product in manufacturing its commercially available perovskite solar cells (“PSC”).

This is an addition to the existing Joint Development Agreement and Cooperative Research Centre Project (CRC-P) Partners Agreement reached in June 2022 and August 2023 respectively.

### Market-ready product with multiple sector applications

Under the pre-existing CRC-P Partners Agreement, FGR and Halocell have successfully investigated and introduced graphene to carbon paste with a focus on fine tuning formulation, concentrations, components and syntheses.

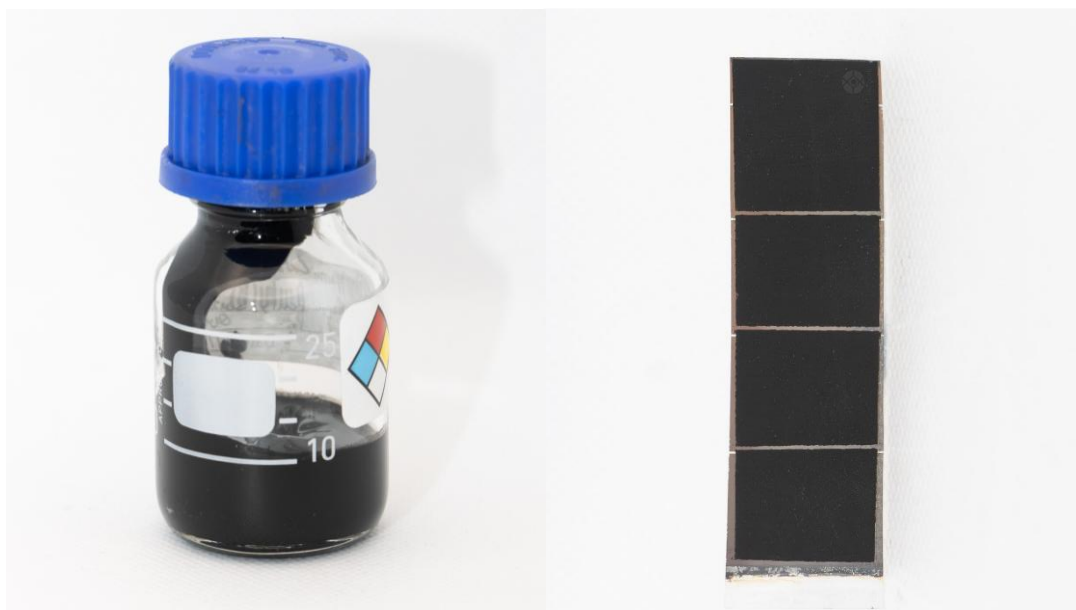
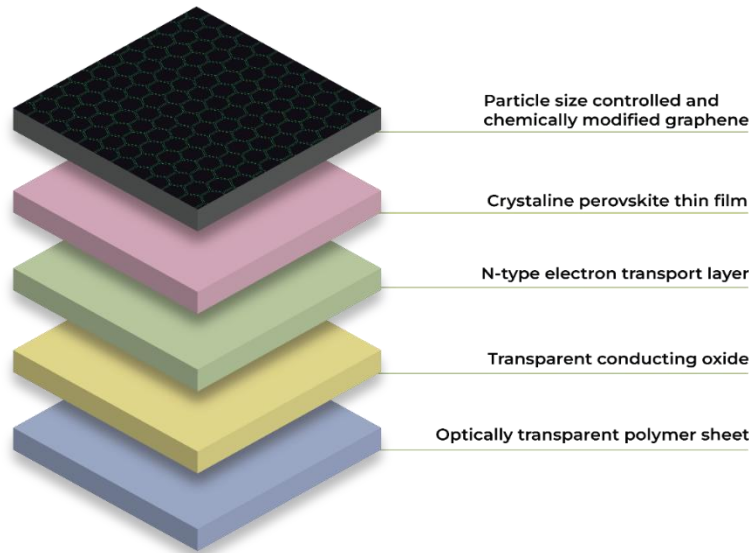


Figure 1: Graphene-enhanced carbon paste (L); paste layer on a perovskite solar cell (R).

For personal use only

The paste is already used in the manufacture of Halocell's PSCs, which has doubled PSC efficiency to more than 30% and dramatically reduced production costs via roll-to-roll ("R2R") deposition technology producing thin-film perovskites.

It is preferred over traditional conductors such as gold because of significant material and production cost reductions while maintaining high performance output and enhancing robustness.



*Figure 1: Typical perovskite solar cell layers including graphene carbon*

Halocell's indoor PSCs are already sold in the global market for use in small electronic devices due to their ability to achieve high power conversion efficiency in low light conditions.

There are 44 additional devices identified across the satellite, aerospace, IoT, electronics and renewable energy sectors that could benefit from PSC technology (refer [ASX announcement](#) 27 August 2025).

Halocell, in partnership with V-Tol Aerospace and Li-S (ASX:LIS), is already developing a lightweight power solution including next generation solar and batteries to significantly increase the flight duration of electric powered drones.

The graphene-based carbon paste can also be applied to a range of conductive applications such as heating systems and sensors, ceramic coatings, electrodes and electrochemical mixes.

Manufacturing sample graphene enhanced carbon paste material at First Graphene's Henderson facility is planned to commence within the next month.

**First Graphene Managing Director and CEO Michael Bell said:**

*"First Graphene and Halocell's partnership is going from strength to strength, introducing PureGRAPH® to accelerate solar technology improvements and bringing enhanced PSCs to market.*

*Through this Agreement, we can leverage carbon paste intellectual property already developed and take this product to global markets, which is mutually beneficial to Halocell in meeting their own*

For personal use only

## ASX ANNOUNCEMENT

*ambitious manufacturing targets to help meet growing product demand for PSCs.*

*While the carbon paste market is set to more than double to circa US\$2.8 billion by 2032, the real opportunity comes from the multitude of applications and products that can benefit from better performance, longevity and efficiency our PureGRAPH® offers.”*

### **Halocell Australia CEO Paul Moonie said:**

*“Working with FGR to introduce functionalised graphene into our perovskites has produced groundbreaking module efficiency and R2R production results.*

*We see this additional agreement as an excellent opportunity to market graphene-enhanced carbon paste to technology developers around the world and demonstrate how Australian manufacturing is at the forefront of this new age material revolution.”*

**-Ends-**

**This release has been approved for release by the Chairman.**

For further information please contact:

### **Investors**

**Michael Bell**  
Managing Director and CEO  
First Graphene Limited  
michael.bell@firstgraphene.net  
+61 1300 660 448

### **Media**

**Emily Evans**  
Media and Content Manager  
SPOKE.  
emily@hellospoke.com.au  
+61 401 337 959

### **About First Graphene Ltd (ASX:FGR)**

*First Graphene Limited is focused on the development of advanced materials to help industry improve. The Company is a leading supplier of graphitic materials and product formulations with a specific commercial focus on large, high-growth global markets including cement and concrete; composites and plastics; coatings, adhesives, sealants and elastomers (CASE); and energy storage applications.*

*One of the key outcomes these advanced materials offer is the reduction of carbon dioxide emissions, whether directly through a reduction in output of these harmful greenhouse gases or lower energy usage requirements in manufacturing, or indirectly due to enhanced performance characteristics and extending the usable life of products.*

*First Graphene has a robust manufacturing platform based on captive and abundant supply of high-purity raw materials, and readily scalable technologies to meet growing market demand. As well as being the world’s leading supplier of its own high performance PureGRAPH® graphene product range, the Company works with multiple industry partners around the world as a supplier of graphitic materials and partner to research, develop, test and facilitate the commercial marketing of a wide range of sector-specific chemical solutions.*

*First Graphene Ltd is publicly listed in Australia (ASX:FGR) and has a primary manufacturing base in Henderson, near Perth, WA. The Company is incorporated in the UK as First Graphene (UK) Ltd where it has a strong R&D capability.*

For personal use only