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UK partnership expands as PureGRAPH[®] heat sensors enter market

Highlights

- **First Graphene signs three-year Strategic Partner Agreement with UK-based Vector to expand commercial opportunities for graphene products**
- **Agreement secured as Vector launches new graphene-enhanced printed heat flux sensors used to measure thermal performance of buildings**
- **The new ‘Peltyr’ product represents another commercial application for First Graphene’s PureGRAPH[®] in the construction sector**
- **Opportunity to market graphene-enhanced heat flux sensors to broader industrial, aerospace, automotive, and HVAC industries**

First Graphene Limited (ASX: FGR; “First Graphene” or “the Company”) (FRA:M11) (OTCQB:FGPHF) has entered into a Strategic Partner Agreement (“Agreement”) with UK-based Vector Companies Group Limited (“Vector”), alongside the commercial launch of Vector’s Peltyr printed heat flux sensor technology incorporating First Graphene’s PureGRAPH[®].

The 36-month agreement enables Vector to introduce prospective end-users to First Graphene for its broad range of graphene products. Vector may also purchase products directly from First Graphene under separate purchase orders.

The commercial partnership broadens the existing relationship between the two companies and provides First Graphene with an additional channel to prospective customers through Vector’s network across advanced materials, manufacturing and the built environment.

The agreement comes as Vector launched its low-cost printed heat flux sensors, containing First Graphene’s PureGRAPH[®], into a dedicated product line called Peltyr.

Peltyr is designed to measure the actual rate of heat passing through building fabric such as walls, floors and roofs, enabling users to calculate an in-situ U-value rather than relying solely on modelled assumptions.

A building fabric’s U-value is a standard measure of how readily heat passes through a structure, with a lower U-value generally indicating better insulation performance.

This enables building owners, retrofit assessors and housing providers to measure actual thermal performance before and after energy-efficiency upgrades.

Importantly, heat flux sensing is used across building physics, industrial process monitoring, research, aerospace, automotive, HVAC, meteorology and other applications where understanding heat transfer is important.

The global heat flux sensor market is anticipated to reach US\$455.8 million by 2034¹, driven by growing demand from these industries, representing a significant opportunity for First Graphene to expand its commercial presence in this market.

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

“Our Strategic Partner Agreement with Vector builds on the productive relationship we’ve had across advanced materials and gives both companies a framework to identify and progress new commercial opportunities.

The launch of this PureGRAPH®-enhanced heat flux sensor is one such opportunity, representing an important milestone for both Vector and First Graphene and showcasing another example of our products transitioning from development into a commercial reality.

Peltyr demonstrates exactly what we want to achieve with our partners. By using the unique performance characteristics of graphene to solve a real industrial problem, we can develop a product that can be manufactured at scale and commercially adopted by industry.

Buildings account for a significant share of global energy use and measuring how they actually perform is essential as the construction industry moves towards a lower carbon future.

A lower-cost, scalable sensor that can provide real performance data has applications well beyond a single building project, with opportunities in other sectors such as aerospace coming to light.

This heat flux sensor adds another commercially available application to the growing portfolio of products using First Graphene materials, and we look forward to supporting Vector as Peltyr moves through commercial rollout.”

-Ends-

This announcement has been approved by the Chairman.

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References

¹[Dataintel](#)

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.