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## **PETRONAS Launches New Graphene-based Corrosion Protection Technology**

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ProShield+ technology has been tested at the company's units operating in both upstream and downstream sectors.

Malaysian energy company [PETRONAS](#) has introduced a new advanced material-based technology to protect assets from corrosion.

Called [ProShield+](#), the offering is a paint additive for steel structures developed in-house using graphene material.

The composition is claimed to have three times the water barrier qualities of traditional epoxy paint, which helps to increase adhesion and resilience to abrasion and UV light.

Major paint systems can be enhanced with ProShield+ to double the typical surface coating lifespan and extend it to up to 16 years, the company claims.

PETRONAS has piloted and deployed ProShield+ at its units operating in both upstream and downstream sectors.

PETRONAS senior vice president of Project Delivery and Technology Datuk Bacho Piong said: "As a dynamic global player in the energy industry, PETRONAS is progressively stepping out and constantly pursuing innovation to address business pain points and sustainability concerns. ProShield+, PETRONAS' first advanced material product, a result of dedicated research and development in advanced materials, is part of PETRONAS' dynamic venture into growth areas to facilitate the energy transition."

According to PETRONAS' calculations, the application of ProShield+ to the structures can cut the overall carbon footprint by an average of 50% per platform annually.

It is also expected to slash repainting maintenance costs by nearly 66% per platform.

Other graphene-based formulations in PETRONAS' portfolio of advanced materials include one that can be sprayed on composites to improve their mechanical qualities, and one that can be used with lithium-ion batteries to improve their performance.

Read the [original article](#) on Offshore Technology.