



# **New Prius Harvests The Rewards Of Plant-based Plastics**

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## **Pioneering use of Toyota's Ecological Plastic**

When it comes to environmental performance, new Prius's achievements are not just about the fuel economy and clean running offered by its Toyota Hybrid Drive full hybrid powertrain. Toyota's determination to reduce emissions and promote sustainability prompted it to research and develop the world's first injection moulded material to be derived from plant matter.

This new Ecological Plastic is used throughout new Prius, and will be featured widely in Toyota's new model ranges in the future. In the short term, Toyota's aim is for Ecological Plastic to be used for up to 60 per cent of a car's interior components.

There are two types of Ecological Plastic: one produced entirely from plant stuffs, and another manufactured from a combination of plant and petroleum-based materials. As plant matter makes up a percentage of both types, CO<sub>2</sub> emissions linked to Ecological Plastic throughout its lifecycle are around 20 per cent less than for conventional plastics.

This is because much of the CO<sub>2</sub> produced when the material is ultimately disposed of is offset by the amount of gas that was absorbed through photosynthesis when the plants used to make it were growing.

Ecological Plastic meets the heat and shock-resistance requirements for use in vehicle interiors, with different raw material combinations used to create the appropriate quality, strength and durability for different parts. The plant-derived materials used include polylactic acid, plant-derived polyester, kenaf fibre and polyol, which is derived from castor oil.

Ecological Plastic is used for foam and injection moulded parts in new Prius, including the seat cushions, scuff plates and deck trim.

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