

## 塑膠袋與紙袋之環境衝擊比較評析

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### 摘要

塑膠袋與紙袋為常見之購物袋，國內平均一年使用 200 億個塑膠購物袋及 28 億個紙購物袋，於是每年亦隨之產生數量龐大之廢塑膠袋與廢紙袋，對國內生態環境勢必造成一定程度之衝擊，因此近年來廢塑膠袋與廢紙袋對環境之影響衝擊也普遍引起重視。由於廢紙袋容易被資源再生，且於棄置時可被生物自然分解，因此相較於塑膠袋被一般民眾視為較環保之材質，但是依生命週期觀點而言，評估任何物質對環境衝擊之大小，不應只考慮其於棄置時之影響，尚需考慮其於原料取得、生產製造、運輸、消費使用等各階段，對環境所可能造成之衝擊。有鑑於此，本文乃收集國內、澳洲與德國在探討塑膠袋與紙袋對環境衝擊之研究成果，來綜合比較評析塑膠袋與紙袋對環境衝擊大小。根據本文之綜合評析結果顯示，如果綜合考慮塑膠袋與紙袋於各階段對環境之衝擊，則紙袋對環境之衝擊可能並不小於塑膠袋對環境之衝擊危害。

**關鍵詞：**生命週期分析，購物袋，塑膠，紙，環境衝擊

## Comparisons of Environmental Impact between Plastic Bags and Paper Bags

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### ABSTRACT

Plastic and paper bags are commonly used during shopping activities. On the average, 20 billion plastic bags and 2.8 billion paper bags are consumed each year in Taiwan. This phenomenon generates a huge amount of scrap plastic and paper and causes a heavy burden on the environment. Since a paper bag can be easily recycled and degraded naturally during the disposal cycle, it is widely regarded as a more environmental friendly bag than plastic. However, from the life-cycle assessment point of view, the environmental impact of a material is judged by its various life cycles, not merely the disposal cycle. In order to compare the environmental impact of plastic and paper