

Markets for Carbon Nanotubes as Transparent Conductors

<https://marketpublishers.com/r/M453CF82405EN.html>

Date: January 2015

Pages: 0

Price: US\$ 1,995.00 (Single User License)

ID: M453CF82405EN

Abstracts

Carbon nanotubes (CNTs) as transparent conductors (TC) have been an on-again, off-again affair for almost a decade. Originally proposed as a future competitor for ITO in the display industry, CNTs have lost mindshare as silver coatings and grids have proven easier to commercialize.

In the past couple of years, however, CNTs have been showing promise again as a low-cost TC developed in Asia and used for low-performance cell phones. Meanwhile, some of the firms that continue to work on a high-quality CNT TC are claiming progress and believe that they will have a material that can challenge ITO for use in touch-screen sensors within a relatively short space of time. But how far can CNTs really go this time? Do low-cost CNTs really have a future or are they just a curiosity? Will any firm manage to bring CNTs into the TC mainstream? And will CNTs ever be able to best what silver coatings have to offer in the TC space?

In this report, NanoMarkets provides a thorough analysis of the prospects for CNTs in the TC space. It shows how these materials currently compare with the main TC alternatives and how this is likely to change in the future. It also examines how CNT-based materials fit into requirements for TCs in the display, solar panels, lighting, anti-statics and EMI shielding.

Based on our analysis of current R&D directions in this space and market requirements, we also propose a roadmap for how CNTs will evolve in the TC marketplace in the next eight years. This is accompanied by a detailed eight-year forecasts of CNT materials in the TC space, with breakouts by application and performance type. These forecasts are presented in square meters of coating and by value of the market. Finally, the report assesses the changing CNT TC supply chain, covering both the primary suppliers of the

TC material and CNT firms who have targeted the TC space.

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