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FIVE TRENDS SHAPING THE FUTURE OF THE RECOVERED CARBON BLACK MARKET

The recovered carbon black market is growing and gaining traction due to a surge in demand for environmentally friendly and sustainable reinforcing fillers in tire and non-tire applications, and abundant availability of recyclable tires. The rising wave of environmentally friendly recovered carbon black is creating significant potential in various transportation, building and construction, industrial, printing and packaging, and other industries. The major growth drivers for this market



are increasing use of recovered carbon black in the tire industry and growing environmental concern around lowering the carbon footprint.

The recovered carbon black market is divided into several segments, such as tire, non-tire rubber, and others. Key players in the recovered carbon black market include Pyrolyx, Scandinavian Enviro Services, Black Bear Carbon, Delta Energy, Integrated Resource Recovery, and Klean Carbon. These have been working on different strategies to drive sales using highly influential marketing approaches; however, as we examine the challenges and opportunities ahead in this market, companies can benefit from a strategy of developing environmentally friendly recovered carbon black, and develop capabilities in the waste management of scrap tires, along with the key target market trends we have identified. Lucintel predicts the global recovered carbon black market is expected to grow at a CAGR of approx. 13.0% between 2020 and 2025.

Lucintel identifies five trends set to influence the global recovered carbon black market. Most of the industry players and experts agree that these five trends will accelerate developments in the recovered carbon black industry in the near future. In terms of the widespread knowledge about the recovered carbon black market already on the horizon, there is still a lack of unified perspective on the direction the industry is moving to proactively address developments. To help bring more clarity to this gap, our study aims to provide insights concerning the direction that changes are taking and how these changes will impact the recovered carbon black market.

1. Replacement of Virgin Carbon Black with Recovered Carbon Black

Recovered carbon black can be used to replace virgin carbon black in various applications such as plastic masterbatch, roofing products, inks, and others. For each kilogram of recovered carbon black





used to replace traditional virgin carbon black, there is an offset of approximately 1.5 to 2 kilograms of crude oil, which also translates to significant CO₂ emission savings of approximately 3 metric ton for every ton replaced with recovered carbon black. The use of recovered carbon black instead of virgin carbon black reduces the carbon footprint by almost 80%, and most of the large tire manufacturers are striving to use a significant amount of recovered carbon black (rCB) in the near future.

2. Environmentally Friendly Recovered Carbon Black

Recovered carbon black is an eco-friendly substance that is extracted from disposed tires during

recycling. Recovered carbon black is mainly derived by pyrolysis from scrap tires and contains non-carbonaceous materials of up to 10-20% by weight. For the tire and carbon black industries, recovered carbon black offers a cost-effective option, as it significantly reduces CO₂ and greenhouse gas emissions compared to virgin carbon black production. Recovered carbon black is an environmentally friendly product and can be marketed as



such. Gases emitted by pyrolysis and depolymerization techniques are not harmful to the environment, making this an environmentally friendly production method.

3. Growing Demand for Waste Management of Scrap Tires

Tire waste is considered to be the most important source of carbon black. There is growing demand for the effective waste management of scrap tires, which is helpful in preventing the depletion of natural resources. Scrapped tires are recycled through the





process of pyrolysis, which provides an environmentally viable alternative to the current disposal method for waste tires. Pyrolysis is a process which uses waste tire shreds to produce valuable recovered carbon black, with quality properties enabling it to be used as an alternative for, or used in combination with, virgin carbon black. Recovered carbon black is useful for avoiding the utilization of costly and highly polluting natural resources. Recovered carbon black is helpful in preventing consumption of various natural resources, such as tons of feedstock oil, coal tar, and ethylene, and it supports reduction of carbon emissions.

4. Use of Recovered Carbon Black in the Rubber Industry

Recovered carbon black is used as a reinforcing agent in tires. Recovered carbon black is used

to improve physical properties and make tires more durable. By using recovered carbon black, tire manufacturers can reduce their need for virgin material, which is produced by the partial combustion of hydrocarbons into soot. The production of rCB is significantly better for the environment since it does not involve the combustion of fossil fuels. The use of recovered carbon black in tires provides unique



compound properties. It enhances the tensile strength, tear strength, and abrasion resistance features of the rubber. It increases overall load bearing, durability, and tread wear performance in tires.

5. Growing Use of Recovered Carbon Black in Non-Tire Rubber Products

Recovered carbon black is used as a reinforcing agent in the production of several non-tire rubber products. These products include conveyor belts, hoses, gaskets, seals, rubber sheets,



geomembranes, and rubber roofing. It is also used in footwear rubber to impart abrasion resistance. Recovered carbon black increases the strength of mechanical rubber products, as it has low ash content.



Strategic Considerations for Key Players in the Recovered Carbon Black Market

The recovered carbon black industry is dynamic and ever-changing. Successful industry players are necessarily masters of innovation, change, and adaptation. To retain this status, they need to be attentive to current trends. We believe there will be promising opportunities for recovered carbon black in the transportation, industrial, building and construction, and packaging industries. As per Lucintel's latest market research report (Source: https://www.lucintel.com/recovered-carbon-black-market.aspx), the recovered carbon black market is expected to grow with a CAGR of approx. 13.0% between 2020 and 2025. This market is primarily driven by the increasing use of recovered carbon black in the tire industry and growing environmental concern around lowering the carbon footprint.





Whether you are new to the recovered carbon black market or an experienced player, it is important to understand the trends that impact the development process, as these trends as listed above will lead players to create long-term strategy formulation that will allow them to remain competitive and successful in the long run. For example, to capture growth, some of the strategic considerations for players in the recovered carbon black market are as follows:

- Recovered carbon black market players can increase their capabilities in the waste management of scrap tires.
- Players can focus on non-tire rubber and specialty applications, which are expected to lead future trends.
- Investment to increase competencies in the development of environmentally friendly recovered carbon black
- Research and development activities for development of low-cost recovered carbon black with better properties

Note: In order to gain better understanding, and learn more about the scope, benefits, and companies researched, as well as other details in the recovered carbon black market report from Lucintel, click on <u>https://www.lucintel.com/recovered-carbon-black-market.aspx</u>. This comprehensive report provides you in-depth analysis on market trends and forecast, segment analysis, regional analysis, competitive benchmarking, and company profiling of key players. In addition, we also offer **strategic growth consulting** to meet your customized needs. We have worked with many PE firms and corporate customers in the process of their market entry and M & A initiatives.





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- · Management comprised of PhDs, MBAs, and subject matter experts. Head quarter in Dallas, USA.

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