

## Production of recycled polymer material via post consumer carpets recycling

Turkey is in top three at world about carpet production in consequence of over annual 300 million m<sup>2</sup> new carpet production at Turkish carpet industry. Domestic consumption quantity is annual 120 m<sup>2</sup>. These post consumer carpets has a valuable property. This property is over 80% of new carpet products are made by recyclable plastics as known as thermo-plastics. Due to these information and recycled polymer market, annual carpet wastes is approximate 180 Million Turkish Lira and carpet wastes are increasing every year.

At this project we are working on collection of post consumer carpets, sort them according to base polymer kinds, extraction polymer material from waste carpets and production recycled polymer raw materials from these extracts. These raw materials with 99% purity ratio expectation will use at industries from new carpet production to automotive parts production.

Turkey is dependent to other countries about petrol and petroleum-derived products. By means of using recycled polymer material which are petroleum-derived provides new opportunity for production, contribute to economy via reducing import quantity, reduces effects of currency changes on plastic industry and enhance rivalry environment at markets. Our company will call to Turkish plastic market with these causes and benefits.

When compare between carpet recycling and other plastic recycle systems, at carpet recycling, seems less equipment needs and more pure material as soon as 99% than other systems. Because of these benefits, recycled plastic materials from waste carpets can compete with other recycled plastic in the market.

Our company is at first year on this project and at the end of year, it aims to complete carpet recycling system and make an commercial prototype via start recycling production

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