



**HCA Consulting China Company Ltd.**

website: [www.hcacchina.com](http://www.hcacchina.com), Email: [request@hcacchina.com](mailto:request@hcacchina.com)

---

## **ANALYSIS OF POLYETHYLENE RECYCLING MARKET IN CHINA**

Dear client,

Polyethylene (PE) is one of the major plastics consumed in China. In 2022, the total consumption in China was 37.5 million tons, and PE recycling rate was 9%. By 2030, PE consumption is expected to be 60.5 million tons with a recycling rate of 20%.

HCA developed a report of Assessment of Polyethylene Recycling Market in China in June 2023.

This report will help clients to understand China's current and future market size of recycled PE, technologies used for PE recycling, policies related to plastic recycling, licenses required, and key players along the value chain.

The list of key players analyzed in this report is in Attachment 1

Key information developed is in details in Attachment 2.

The information is obtained from telephone and field interviews. HCA analyzed the RE recycling market in detail from a third party's perspective.

The report is ready on June 30, 2023.

Subscribers can be prepared with this report to access the market information and the performance of their key competitors, and their future plans.

The costs of the study are listed below

- USD 7,000 or RMB 52,500 for English version

- USD 6,000 or RMB 45,000 for Chinese version
- USD 11,000 or RMB 82,500 for both English version and Chinese version

If you would like to subscribe, please email to Dr. Hao Li, Managing Director of HCA Consulting China ([request@hcacchina.com](mailto:request@hcacchina.com))

Sincerely

Dr. Hao Li

Managing Director of HCA

**ATTACHMENT 1: LIST OF 10 recycling PE producers and 3 pyrolysis producers**

<b>Recycling PE producers</b>		
1	Suzhou Jinhui Technology Materials	Private
2	Veolia Huafei Polymer Technology (Zhejiang)	JV
3	Kingfa Sci.& Tech	Public
4	Jiangxi Handa Plastic Industry	Private
5	Qingdao Yingtuo Environmental Protection Technology	Private
6	Shanxi Kerong Renewable Resources Recycling and Utilization	Private
7	Hunan Zhongsu New Material Technology	Private
8	Taizhou Haoxin Environmental Protection Technology	Private
9	Guangxi Wuzhou Guolong Recyclable Resources Development	Private
10	Ningbo Topcentral New Material	Private
<b>Pyrolysis producers</b>		
1	Hengyang Tengsheng	Private
2	Leping Zhongli Renewable Resources	Private
3	Zhejiang COMY	Private

**ATTACHMENT 2: OUTLINE – ASSESSMENT OF RECYCLED PE MARKET IN CHINA**

<b>Objective</b>	<p>The overall objective of the report is to understand</p> <p>The overall recycled PE market including supply, demand and end use applications</p> <p>Recycled PE value chain</p>
<b>Target products</b>	Recycled PE: HDPE, LDPE, LLDPE
<b>Target companies</b>	Recycled PE producers
<b>Geographic focus</b>	Mainland China
General overview of recycled PE	<p>Definition of recycled PE</p> <p>Source of recycled PE</p> <p>PE recycling technology</p> <p>Physical recycling</p> <p>Chemical recycling</p> <p>Total recycling volume of plastics in China 2022, volume vs. value</p> <p>% of PE recycling</p> <p>Comparison of plastic recycling technology</p> <p>Physical recycling</p> <p>Chemical recycling</p> <p>Physical – Chemical recycling</p>
Recycled PE market – Physical recycling	<p>PE consumption and recycling rate, 2022 and 2030</p> <p>Different types of PE recycled, 2022 and 2030</p> <p>Recycled HDPE</p> <p>Recycled LDPE</p> <p>Recycled LLDPE</p>

	<p>Virgin PE finished products and recycled PE</p> <p style="padding-left: 40px;">HDPE/LDPE/LLDPE</p> <p>Key end use applications of recycled PE</p> <p style="padding-left: 40px;">HDPE/LDPE/LLDPE</p> <p style="padding-left: 80px;">Name of key customers (best effort)</p> <p>Key raw material sources</p> <p style="padding-left: 40px;">Difficulty of collection</p> <p style="padding-left: 40px;">Recycling rate</p> <p>General supply chain for recycled PE</p> <p style="padding-left: 40px;">Source</p> <p style="padding-left: 40px;">Value chain</p> <p style="padding-left: 80px;">Participant</p> <p style="padding-left: 80px;">Number of players</p> <p style="padding-left: 80px;">Examples of key players</p> <p style="padding-left: 80px;">Roles played</p> <p>Recycled PE shipment and storage</p> <p>Recycling process and technology used</p> <p style="padding-left: 40px;">Step 1: sorting of plastics and non-plastics</p> <p style="padding-left: 40px;">Step 2: sorting PE and other plastics</p> <p style="padding-left: 40px;">Step 3: sorting HDPE/LDPE/LLDPE</p> <p>Recycled PE processing technology</p> <p style="padding-left: 40px;">Hard plastics vs. flexible plastics</p> <p>Key equipment suppliers of PE recycling</p> <p>Recycling process of HDPE, LDPE and LLDPE</p> <p style="padding-left: 40px;">Collection</p> <p style="padding-left: 40px;">Sorting</p>
--	--

	<p>Processing</p> <p>Recycled PE market volume in 2022 and 2030, by product type (HDPE, LDPE, LLDPE)</p> <p>Production</p> <ul style="list-style-type: none"> <li>PE consumption</li> <li>Recycling rate, %</li> <li>Recycled PE output</li> <li>Recycled PE capacity</li> <li>Utilization rate, %</li> </ul> <p>Import</p> <ul style="list-style-type: none"> <li>Key sources</li> </ul> <p>Export</p> <ul style="list-style-type: none"> <li>Local consumption</li> </ul> <p>Key drivers for recycled PE future growth</p> <ul style="list-style-type: none"> <li>Market size and development</li> <li>Standardization of the recycling industry</li> <li>Profitability of the industry</li> <li>Declined imports of recycled PE</li> <li>Price of recycled PE</li> <li>Downstream market demand</li> <li>Policy impacts</li> </ul> <p>Key barriers for recycled pe future growth</p> <ul style="list-style-type: none"> <li>Price vs. performance</li> <li>Competitive materials</li> </ul> <p>Government regulations</p> <p>Certification</p>
--	---

<p>Recycled PE market – chemical recycling</p>	<p>Chemical recycling process for waste plastics</p> <p>Typical chemical recycling plastics and their applications</p> <ul style="list-style-type: none"> <li>Waste PET</li> <li>Waste polyolefin</li> </ul> <p>Overview of the market for producing pyrolysis oil from waste PE</p> <ul style="list-style-type: none"> <li>Key players and their operations</li> <li>Market size</li> <li>Related patents</li> <li>Related policies</li> </ul>
<p><b>Recycled PE producer analysis</b> (10 companies)</p>	<ul style="list-style-type: none"> <li>Name of the company</li> <li>Background information <ul style="list-style-type: none"> <li>Ownership</li> <li>Headquarter</li> <li>Manufacturing site(s)</li> <li>Website</li> </ul> </li> <li>Main business of the company</li> <li>PE recycling history</li> <li>Major product categories <ul style="list-style-type: none"> <li>Types of recycled PE</li> </ul> </li> <li>Recycled PE production in 2022, by product type (HDPE, LDPE, LLDPE) <ul style="list-style-type: none"> <li>Capacity, MT/year</li> <li>Output, MT</li> <li>Export, MT</li> <li>Local sales, MT</li> </ul> </li> <li>Description of recycled PE end use applications</li> </ul>

	<p>Source of recycled PE technologies</p> <p>Raw materials sourcing</p> <p>Certification of recycled PE</p> <p>Price of recycled PE</p> <p>Expansion plan</p>
<p><b>Pyrolysis oil producer analysis</b></p> <p>(3 companies)</p>	<p>Name of the company</p> <p>Background information</p> <p>    Ownership</p> <p>    Headquarter</p> <p>    Manufacturing site(s)</p> <p>    Website</p> <p>    Main business of the company</p> <p>    Pyrolysis oil production history</p> <p>Pyrolysis oil production in 2022</p> <p>    Capacity, MT/year</p> <p>    Output, MT</p> <p>    Export, MT</p> <p>    Local sales, MT</p> <p>Description of recycled PE end use applications</p> <p>Raw materials sourcing</p> <p>Pyrolysis oil price</p> <p>Expansion plan</p>