What trade regulations will affect PET?
About **K-PET Consulting**

Founded in 2013 by leading industry professionals of PET/Polyester industry, **K-PET Consulting (KPC)** operates worldwide through its offices and correspondents located in: **Barcelona (headquarter), Madrid, Cologne, Athens, Mumbai and Bangkok.**
About K-PET Consulting

- Special Products Development
- Market & Marketing Studies
- Industry Benchmarking
- Project Management
- Sourcing and Sales
- Technology
- Energy
- 3D Printing
About K-PET full expertise

Technology transfer to produce SPECIAL PET resins with better profitability vs. standard PET

Selling and trading of all SPECIAL PET resins. Worldwide sources

Advise and guidance on: Trade Defence instruments, improving your sales, regulatory issues, energy saving, conversion costs, use of rPET, plant audits...
General Overview
Trade Regulations
Trading between individuals is the earliest form of economic activity.

- General Agreement on Tariffs and Trade (GATT)
  - Most-favored-nation treatment (Article I)
  - Anti-dumping and Countervailing Duties (Article VI)

- World Trade Organization (WTO)
Why trade regulations

To avoid governmental regulation of unfair methods of competition and unfair or deceptive business acts or practices.

Real Trade Regulations are not Protectionism. The aim is to guarantee the equality in the commercial relation amongst the countries, to keep global economy open.

Trade regulations are only applied once the governments have verified, in honest and serious way, that one Party (country or region) is acting unfairly (breaching the rules of the WTO).
Trade Defence Instruments (TDI) for PET

• Three main regulations in the European Union

— European Regulation (EU) No 2016/1036 on protection against DUMPED IMPORTS
— European Regulation (EU) No 2016/1037 on protection against SUBSIDISED IMPORTS
— European Regulation (EU) No 2015/1843 known as the Trade Barriers Regulation (it has rarely been used in practice)

• Other legal trade defence instruments

Both European Regulations need to be applied under the amendments established in the Regulation (EU) 2017/2321
Main TDI measures that affect PET

Anti-dumping (AD)

A company is dumping if it is exporting a product to the EU at prices lower than the normal value of the product (the domestic prices of the product or the cost of production) on its own domestic market.
Main TDI measures that affect PET

Dumping or NOT?

Normal Value: 1,0€/Kg:

Export Price: 1,10€/Kg:

Normal Value: 1,15€/Kg:

Normal value (fixed costs, variable costs, sales, depreciation...)

[Image of China and Europe with territorial markers and price comparisons]
The intervention of the European authorities on unfair trade practices is not limited to anti-dumping measures. Action can also be taken against illegal subsidies.

The EU anti-subsidy rules define a subsidy as "a financial contribution made by (or on behalf of) a government or public body which confers a benefit to the recipient".

The EU may impose countervailing duties to neutralize the benefit of such a subsidy only if it is limited to a specific firm, industry or group of firms or industries.

Export subsidies and subsidies contingent on the use of domestic over imported goods are deemed to be specific.
Main TDI measures that affect PET

Anti-subsidy (AS)

Are all subsidies illegal?

Not all subsidies are illegal. Horizontal subsidies are permitted to small and medium sized enterprises as well as for research and development activities, environmental protection, rescue and restructuring, and employment and training.

Example of punished subsidies:

- A direct transfer of funds (e.g. grants, loans, equity injection...)
- Government revenues (which are otherwise due) foregone or not collected (e.g. tax credits)
- Government provision of goods and services (other than general infrastructure)
- Government purchase of goods
Main TDI measures that affect PET

Anti-Dumping and Anti-subsidy Comparison

The main difference between the legislation on dumping and the legislation on subsidies is that the latter concerns the government, although for both legislations duties are imposed on individual companies.

In cases where both anti-dumping duties and countervailing duties are imposed, the Community does not impose the same penalty twice, but instead introduces duties up to the degree of injury suffered by the Community industry.

Anti-dumping and/or anti-subsidy cases could be initiated, in any moment, taking into account the WTO principle of non-discrimination.
Main TDI measures that affect PET

Anti-Dumping and Anti-subsidy
Different points of view

LOCAL PET PRODUCERS
- Protect local industry
- Avoid industry subsidies
- Fair competition rules
- Protect local and fair salary employment

CONVERTORS OF GOODS
- Protectionism
- Allows domestic monopolies
- Results in higher prices of goods
- Anti fair trade rules
- Limit purchase freedom from buyers
- May allow “cartel” or price fixing once competition is limited.
Since the turn of the century the European Union has imposed both antidumping and countervailing duties on the importation of bottle grade PET from a number of countries particularly in Asia. Such measures have supported the sector as it is registered losses due to unfair competition. The sector has undergone rationalization and restructuring.

The Committee of Polyethylene Terephthalate (PET) manufactures in Europe (CPME) initiated all trade defence actions with reasonable success.

At present countervailing duties against India is the only remaining measure in force (expiry: 24 May 2018).
Europe has limited the AD and AS cases since 1999

<table>
<thead>
<tr>
<th>AD Cases</th>
<th>AS Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>The total cases of AD have been four (4)</td>
<td>The total cases of AS have been three (3)</td>
</tr>
<tr>
<td><strong>Initiation</strong></td>
<td><strong>Initiation</strong></td>
</tr>
<tr>
<td>1999 (11 reviews)</td>
<td>1999 (11 reviews)</td>
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<tr>
<td>2003 (3 reviews)</td>
<td>2009</td>
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<td>2009</td>
<td>2011</td>
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<td>2011</td>
<td></td>
</tr>
</tbody>
</table>

In every case that a AS investigation has been requested, the same investigation was filed for AD.
Cases of TDI in EU

Case No AD425
- Countries targeted: India, Indonesia, Malaysia, South Korea, Taiwan, Thailand
- Initiation: 6 November 1999
- Definitive measures: 30 November 2000
- All countries with duties
- Expiry: 27 February 2012

Case No AD468
- Countries targeted: Australia, China, Pakistan
- Initiation: 22 May 2003
- Definitive measures: 19 August 2004
- Australia and China with duties
- Expiry: 18 November 2015

Case No AD545
- Countries targeted: Iran, Pakistan, UAE
- Initiation: 3 September 2009
- Definitive measures: NO Measures

Case No AD569
- Countries targeted: Oman and Saudi Arabia
- Initiation: 16 February 2011
- Definitive measures: NO measures
Cases of TDI in EU

Case No AS426
- Country targeted: India, Indonesia, Malaysia, South Korea, Taiwan, Thailand
- Initiation: 6 November 1999
- Definitive measures: 30 November 2000
- Malaysia, Thailand and INDIA. This last still on force
- Expiry: 24 May 2018

Case No AS570
- Countries targeted: Oman and Saudi Arabia
- Initiation: 16 February 2011
- Definitive measures: 14 December 2011
- NO MEASURES

Case No AS546
- Countries targeted: Iran, Pakistan UAE
- Initiation: 3 September 2009
- Definitive measures: 29 September 2010
- All countries with duties
- Expiry: 30 September 2015
Cases of TDI in EU

Since 1999, in EU, the investigated countries have been 13:

- India
- Indonesia
- Malaysia
- South Korea
- Taiwan
- Thailand
- Australia
- China
- Pakistan
- Iran
- UAE
- Oman
- Saudi Arabia
Regulations in force outside EU28

United States

Case: AD and AS
Investigated countries: China, Canada, India, and Oman
Initiation: 6 April 2015
Definitive measures: 6 May 2016

**ANTIDUMPING**

<table>
<thead>
<tr>
<th>Country</th>
<th>Dumping Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>13.60%</td>
</tr>
<tr>
<td>China</td>
<td>104.98% to 126.43%</td>
</tr>
<tr>
<td>India</td>
<td>8.03% to 19.41%</td>
</tr>
<tr>
<td>Oman</td>
<td>7.82%</td>
</tr>
</tbody>
</table>

**ANTISUBSIDY**

<table>
<thead>
<tr>
<th>Country</th>
<th>Subsidy rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>6.83% to 47.56%</td>
</tr>
<tr>
<td>India</td>
<td>5.12% to 153.80%</td>
</tr>
</tbody>
</table>

**CONSEQUENCES**

- Increase imports from Mexico (most US players have PET plants in Mexico)
- Increase imports from Taiwan and Brazil
- Banned around 380,000 MT/y (>40% of imports 2015 - 875,000 MT-)
Malaysia
Case: AD. Investigated countries: China, Indonesia and South Korea

<table>
<thead>
<tr>
<th>Country</th>
<th>Dumping Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1.20% to 14.91%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.87% to 7.21%</td>
</tr>
<tr>
<td>South Korea</td>
<td>14.91%</td>
</tr>
</tbody>
</table>

Indonesia
Case: AD. Investigated countries: China, South Korea and Malaysia
Definitive measures: 14 July 2017. Expiry: July 2022

<table>
<thead>
<tr>
<th>Country</th>
<th>Dumping Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>0.4% to 26%</td>
</tr>
<tr>
<td>South Korea</td>
<td>6.2% to 26%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3%</td>
</tr>
</tbody>
</table>
Brazil
Case: AD. Investigated countries: China, Taiwan, India and Indonesia

<table>
<thead>
<tr>
<th>Country</th>
<th>Dumping Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>(87.23 – 682.38) US$</td>
</tr>
<tr>
<td>Taiwan</td>
<td>682.18 US$</td>
</tr>
<tr>
<td>India</td>
<td>(193.78 - 468.97) US$</td>
</tr>
<tr>
<td>Indonesia</td>
<td>304.42 US$</td>
</tr>
</tbody>
</table>

South Africa
Case: AD. Investigated countries: Taiwan, South Korea and India
Definitive measures: 8 July 2016. Expiry: 8 July 2021

<table>
<thead>
<tr>
<th>Country</th>
<th>Dumping Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>75%</td>
</tr>
<tr>
<td>India</td>
<td>54.1%</td>
</tr>
<tr>
<td>South Korea</td>
<td>19.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume (MT/y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>37.000</td>
</tr>
<tr>
<td>Indonesia</td>
<td>6.000</td>
</tr>
<tr>
<td>Thailand</td>
<td>4.500</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3.000</td>
</tr>
</tbody>
</table>
Argentina
Case: AD. Investigated countries: South Korea, China, Taiwan, India and Thailand
Implemented measures: 29 September 2017. Expiry date: 29 September 2023

Further:
- On 15 March 2017 was imposed AD to Indonesia
- On October 2013, Argentina imposed 8% ADD toward PET bottle chip imported from Asia

<table>
<thead>
<tr>
<th>Country</th>
<th>Dumping Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>17,61%</td>
</tr>
<tr>
<td>China</td>
<td>16%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>15%</td>
</tr>
<tr>
<td>India</td>
<td>12%</td>
</tr>
<tr>
<td>Thailand</td>
<td>9,09%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>15,10%</td>
</tr>
</tbody>
</table>
Turkey

Case: Safeguard measures
Implemented measures: 16 January, 2018
(there were other safeguard measures since November 2011)

-Variable import duty
-Tariff quotes up to 6,995 MT/y (and not more than 2,332 MT per each country)
-The need of a license if the imported product is in the scope of tariff quotes

Further: On Jul 8th 2014, Turkey government announced to impose 7% extra tariff on imported PET.

Turkey is importing from China and through Drawback the duties are returned if material is exported.

Source: ICIS and KPC
What about the future

Possible new regulations
## Open cases

### Canada

Case: AD and AS (under investigation)
Investigated countries: China, India, Oman and Pakistan
Final measures: 16 March 2018

<table>
<thead>
<tr>
<th>Country of origin or export</th>
<th>Estimated Margin of Dumping*</th>
<th>Estimated Amount of Subsidy*</th>
<th>Total Provisional Duties Payable*</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jiangsu Sanfangxiang Group Co. Ltd.</td>
<td>3.3%</td>
<td>22.8%</td>
<td>26.1%</td>
</tr>
<tr>
<td>All other exporters</td>
<td>17.4%</td>
<td>22.8%</td>
<td>40.2%</td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliance Industries Limited</td>
<td>34.0%</td>
<td>3.9%</td>
<td>37.9%</td>
</tr>
<tr>
<td>All other exporters</td>
<td>45.6%</td>
<td>31.1%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Oman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCTAL SAOC FZC</td>
<td>22.2%</td>
<td>0.50%</td>
<td>22.2%</td>
</tr>
<tr>
<td>All other exporters</td>
<td>41.3%</td>
<td>4.0%</td>
<td><strong>45.3%</strong></td>
</tr>
<tr>
<td>Pakistan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novatex Limited</td>
<td>45.6%</td>
<td>0.51%</td>
<td>45.6%</td>
</tr>
<tr>
<td>All other exporters</td>
<td>45.6%</td>
<td>2.3%</td>
<td><strong>47.9%</strong></td>
</tr>
</tbody>
</table>

Source: Canada Border Services Agency (CBSA)
Open cases

United States

Case: AD and AS (under investigation)
Investigated countries: Brazil, Indonesia, South Korea, Pakistan and Taiwan
Definitive measures: 21 May 2018

<table>
<thead>
<tr>
<th>Country</th>
<th>Dumping Margins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>18.78% to 115.78%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8.49% to 53.50%</td>
</tr>
<tr>
<td>South Korea</td>
<td>55.74% to 101.41%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>25.03% to 43.40%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>14.67% to 45%</td>
</tr>
</tbody>
</table>

Potential volume to be banned: around 300,000 MT/y. (>45% of imports 2017 - 665,000 MT-)

Imports of PET Bottle Grade to USA from investigated countries 2014 to 2016

Source: U.S Department of Commerce
Open cases

Japan

-On SEPT 2017, the Government published provisional AD measures against China.
-Margin of dumping: from 39.8% to 53%.

Final measures on 1 January 2018. The duties are the same alleged at the beginning of the investigation. Duration: 5 years (1 January 2023)

As a result, imports to Japan from China shrank from approximately 35,500 tons in December 2016 to 5,200 tons in 2017. Until August 2017, the estimated export PET to Japan could be estimated in 30,000 MT/month

Capacity and Consumption of PET Bottle Grade

Source: ICIS
Current and potential countries with AD/AS duties

- China
  - USA
  - Malaysia
  - Indonesia
  - Brazil
  - Argentina
  - Canada (?)
  - Japan (?)

- India
  - EU
  - USA
  - Indonesia
  - South Africa
  - Argentina
  - USA (?)

- South Korea
  - Malaysia
  - Brazil
  - South Africa
  - Argentina
  - USA (?)

- Taiwan
  - Indonesia
  - Malaysia
  - Brazil
  - Argentina
  - USA (?)

- Oman
  - Malaysia
  - USA
  - Indonesia
  - USA

- Malaysia
  - Canada (?)

- Canada
  - USA

- Thailand
  - Argentina

- Pakistan
  - Canada (?)
  - USA (?)

- Brazil
  - USA (?)

- Oman
  - Malaysia
  - USA
  - Indonesia
  - USA

- Argentina
  - USA (?)

- South Africa
  - Argentina
  - USA (?)

- Indonesia
  - Malaysia
  - Brazil
  - Argentina
  - USA (?)

- USA
  - USA

- Japan (?)

- Taiwan
  - Brazil
  - South Africa
  - Argentina
  - USA (?)

- China
  - Malaysia
  - Indonesia
  - Brazil
  - Argentina
  - Canada (?)
  - Japan (?)

- India
  - EU
  - USA
  - Indonesia
  - South Africa
  - Argentina
  - USA (?)

- South Korea
  - Malaysia
  - Brazil
  - South Africa
  - Argentina
  - USA (?)

- Taiwan
  - Indonesia
  - Malaysia
  - Brazil
  - Argentina
  - USA (?)

- Oman
  - Malaysia
  - USA
  - Indonesia
  - USA

- Malaysia
  - Canada (?)

- Canada
  - USA

- Thailand
  - Argentina

- Pakistan
  - Canada (?)
  - USA (?)

- Brazil
  - USA (?)
Brexit

At present little is known regarding any future trade agreement or even a “customs union”

Will there be a reintroduction of customs duties on PET?

If WTO rules are applied to the United Kingdom, trade defence actions would not consider the issue of “Community interest”.

European Union free trade agreements with for example Mexico, the Republic of Korea and South Africa are all asymmetric. Will that be the case for the United Kingdom?

Potential issue of financial services. Will the UK become a tax haven? (With its offshore territories)
## Concerning PET: Much ado about Nothing?

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of PET in UK</td>
<td>330,000 MT (2017)</td>
</tr>
<tr>
<td>Installed Capacity</td>
<td>350,000 MT (LCUK)</td>
</tr>
<tr>
<td>Exported volume to EU</td>
<td>72,400 MT</td>
</tr>
<tr>
<td>Imports from EU</td>
<td>95,000 MT</td>
</tr>
<tr>
<td>Imports outside EU</td>
<td>3,800 MT</td>
</tr>
<tr>
<td><strong>NET TRADE:</strong></td>
<td><strong>-26,400 MT</strong></td>
</tr>
</tbody>
</table>

If Hard Brexit (no deal) the NET TRADE with EU27 is insignificant

- Increase of exports from NON EU countries to UK (new agreements)
- Relocation of former exports from EU to UK into North Europe
Possible new Trade Defense actions in EU

*In the short and medium term it is unlikely that CPME or any trade association concerned with PET will initiate trade defence actions

*This is the result of a number of factors including:

- There is little enthusiasm among many member states and the European authorities
- While there may be dumping, injury, causality and Community interest is increasingly difficult to demonstrate when prices rise.
- While producers must represent 25% of the industry to lodge in action, in practice this is 50%. Since the largest members of CPME will not participate it is unlikely that this threshold would be met.
- For political reasons including issues of security and the refugees diaspora, any case against Turkey is likely to be rejected.
- There may be an issue of market dominance
# Imports of PET Bottle Grade to EU

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>South Korea</td>
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<tr>
<td>India</td>
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</tr>
<tr>
<td>Turkey</td>
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<tr>
<td>Indonesia</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>China</td>
<td></td>
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</tr>
<tr>
<td>Mexico</td>
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<tr>
<td>Oman</td>
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<tr>
<td>Pakistan</td>
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<tr>
<td>Russia</td>
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</tr>
<tr>
<td>Taiwan</td>
<td></td>
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<tr>
<td><strong>Sub-Total (MT)</strong></td>
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<tr>
<td><strong>% Rate over all imports</strong></td>
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<tr>
<td><strong>Others (MT)</strong></td>
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<td></td>
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<tr>
<td><strong>TOTAL IMPORTS TO EU (MT)</strong></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Source: Eurostat. *Figures reported until end Feb 2018 Value Nov-Dec 2017
Imports of PET Bottle Grade to EU

Currently, only 10 countries cover more than 90% of all PET bottle grade imported to EU

The only Trade Regulation applied in EU, related to PET bottle grade, is:

- AS for India (Expiry: 24 May 2018)
## Exporter of PET Bottle Grade to EU

**Current status of duties for the main 10 exporter of PET Bottle Grade to EU28**

<table>
<thead>
<tr>
<th>Country</th>
<th>Import Duty Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>FTA (0% import duty)</td>
</tr>
<tr>
<td>India</td>
<td>AS (expires on May 2018). 0% import duty (GSP)</td>
</tr>
<tr>
<td>Turkey</td>
<td>0% Import duty (TK Custom Union)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0% Import Duty (GSP)</td>
</tr>
<tr>
<td>China</td>
<td>6.5 Import Duty</td>
</tr>
<tr>
<td>Mexico</td>
<td>FTA (0% import duty)</td>
</tr>
<tr>
<td>Oman</td>
<td>6.5 Import Duty</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0% Import Duty (GSP+)</td>
</tr>
<tr>
<td>Russia</td>
<td>6.5% Import Duty</td>
</tr>
<tr>
<td>Taiwan</td>
<td>6.5% Import Duty</td>
</tr>
</tbody>
</table>

*Note: The duties are subject to changes and may vary depending on the specific agreement and regulations.*
Evolution of some imports to EU28

USA measures of TDI (China, Canada, India, and Oman)
Initiation: 6 April 2015
Final implemented measures: 6 May 2016 (banned around 400,000 MT/y)

*Expired AD against China in EU
Expired: 17 February 2017
## PET Worldwide balance

<table>
<thead>
<tr>
<th>Region</th>
<th>North America</th>
<th>South America</th>
<th>Africa and Middle East</th>
<th>Western Europe</th>
<th>Eastern Europe</th>
<th>Asia Pacific</th>
<th>WORLD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concept</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Installed Capacity (MT/y)</td>
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### 2016

<table>
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<th>South America</th>
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<tbody>
<tr>
<td>Installed Capacity (MT/y)</td>
<td>4,800</td>
<td>1,250</td>
<td>3,350</td>
<td>3,250</td>
<td>750</td>
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<td>550</td>
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### 2017

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<tr>
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<td>1,250</td>
<td>3,350</td>
<td>3,150</td>
<td>750</td>
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### 2018

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<td>650</td>
<td>300</td>
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### 2019

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<tbody>
<tr>
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### 2020

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Source: KPC
<table>
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<tr>
<th>Country</th>
<th>China</th>
<th>India</th>
<th>South Korea</th>
<th>Taiwan</th>
<th>Thailand</th>
<th>Others</th>
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</tbody>
</table>

Source: KPC
During 2017, China exported around 2,100,000 MT
8 countries imported around 50% of all PET exported by China during 2017.
Such destination countries have had the same trade ranking in 2015 and 2016.
The exception is USA. Since AD case was initiated (April 2015), the imports dropped down as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>Philippine</th>
<th>Indonesia</th>
<th>India</th>
<th>Russia</th>
<th>Ukraine</th>
<th>Peru</th>
<th>Chile</th>
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</thead>
<tbody>
<tr>
<td>2014</td>
<td>113,000</td>
<td>42,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
After Japan implements AD against China (January 2018), the likely rearrangements of flows will be:

- South Korea will increase exports to Japan (geographical position)
- Thailand will increase exports to Japan, meanwhile China increases exports to Thailand (Thailand has no duty to enter to Japan)
- Indonesia and Vietnam would also increase exports to Japan. Duty 0%.
- India’s VAT reform has raised local purchasing cost, forcing downstream users to buy from other regions, mainly from China. India would increase much more its exports due to lost of domestic market share.
- EU28 ends the AS in May 2018. It is likely that India will increase exports to EU28 and could take some quota from Mexico’s imports into EU and to limit the further penetration of China’s PET into Europe.
What is the impact of China’s import ban on waste plastic?
China and its waste ban

• China informed the World Trade Organization (WTO) on 18 July that it plans to restrict the import of 24 kinds of solid waste including plastic, paper and textile materials, for environmental reasons. It includes PET in flakes and other forms. Measure in force since 1 January 2018.

• Besides an effort to clean up pollution, the import ban has been described by Chinese authorities as a way to boost domestic collection of recyclables of its middle and high class population.

• Biggest impact in the market for plastics with identification codes No. 3 till 7. Most of PET and HDPE remain in the exporter countries for domestic recycling: 85-90%

![Recyclables imported into China](chart)

2016 2017
Import Waste 7350 5830

Source: Custom of China

The main exporters are: USA, EU (UK), Japan and Australia
China and its plastic waste ban

Possible consequences:

On the short term:

• Some countries may forego plastics collection efforts, leaving plastics to be littered or disposed of in landfills, waterways or the ocean, increasing the pollution worldwide

• Build up of rubbish at recycling plants around the historical exporter countries of recycling to China

• Waste importers are now finding their way to other Asian countries that already have an end market, such as those in fiber production

• The ban changes the competitive landscape for fibers into 2018 and 2019. The country's fiber industry relies on feedstocks to remain competitive in the global market. There would be around 2.5 Millions MT of Polyester + PET (bales and flakes) out from Chinese market

• It seems unlikely that Chinese domestic collection and other sources should rise significantly in the very short term
China and its plastic waste ban

**Possible consequences:**

On the medium and long term:

- Exporting countries being forced to re-evaluate their approach to waste and to improve their collection and sorted systems

- All regions used to export waste to China. There are two views:
  * This as an opportunity to absorb and develop domestic RPET markets.
  * Others are pessimistic about the growing volumes of mixed plastics remaining where there are no markets for the material.

It’s important to remember the Chinese ban was mentioning “unsorted” materials. But the question is: if a country has high quality recycled material, are the countries in need to export?
China and its plastic waste ban

- The highly recyclable plastics which were sent to China were often low-quality and low-value. Some contain a cocktail of toxic additives that threaten recycling workers’ health.

- The bales of plastic recyclables as PET, exported to China are also often contaminated with non-recyclable materials.

- Southeast Asia has traditionally been the single largest source of waste imports into China and is now in the position to further develop its reclamation capacity and secondary markets. With financial investment from China, changes are already being made, and it is likely that Southeast Asia is set to develop its position as leading importer of plastic waste.

- In the near future it is unlikely that other countries in Southeast Asia will apply ban waste plastic imports. However, if the investment to handle the waste is not ready on time, this would have catastrophic consequences for these countries, which are not equipped to take on a tsunami of foreign plastic, and could also result in more plastic leakage into the ocean, landfills and waste incinerators. This could be a matter of international intervention.
Conclusions

• PET Bottle grade resin is facing a new wave of TDI measures around the world
• China, India and South Korea are the most penalized and investigated countries
• The only measure on force in EU (AS – India-) will expiry on 28 May 2018
• India will increase the PET exported into EU (0% import duty).
• In 2018, the exported volume to EU will be similar to 2017
• Unlikely that EU will start new cases to apply TDI on the short or medium term
• PET industry in UK may suffer some damage if there is a hard Brexit
• With the AD Japan against China, an internal change of flows in Asia will occur, but this should not affect significantly to Western Europe
Conclusions (2)

- China ban to plastic waste may increase demand and prices of virgin staple fiber
- Banned volume around: 2.5 Millions MT/y of recycled PET/polyester
- Developed countries will start to improve their collection systems
- Recyclable materials (PET, HDPE) will increase availability
- China ban is a “wake-up” call to all nations
- Likely new regulations will impact mainly the less recyclable plastics (3-7)
- China is investing in South Asia to develop infrastructures to recycle plastics
- Without fast actions, South Asia could become the garbage dump of the world