
减少一次性塑料和循环利用

Reducing Single-used Plastics and Circular Use of Plastics

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自2018年1月中国禁止进口塑料废物后的关于废塑料行动的最新消息：

Updates of China Action on Plastics after Ban of Imported Plastic Waste since Jan 2018:

欧盟行动: 关于塑料的循环经济战略

国际方面: 修订巴塞尔公约的建议

商业和各种联盟的全球承诺

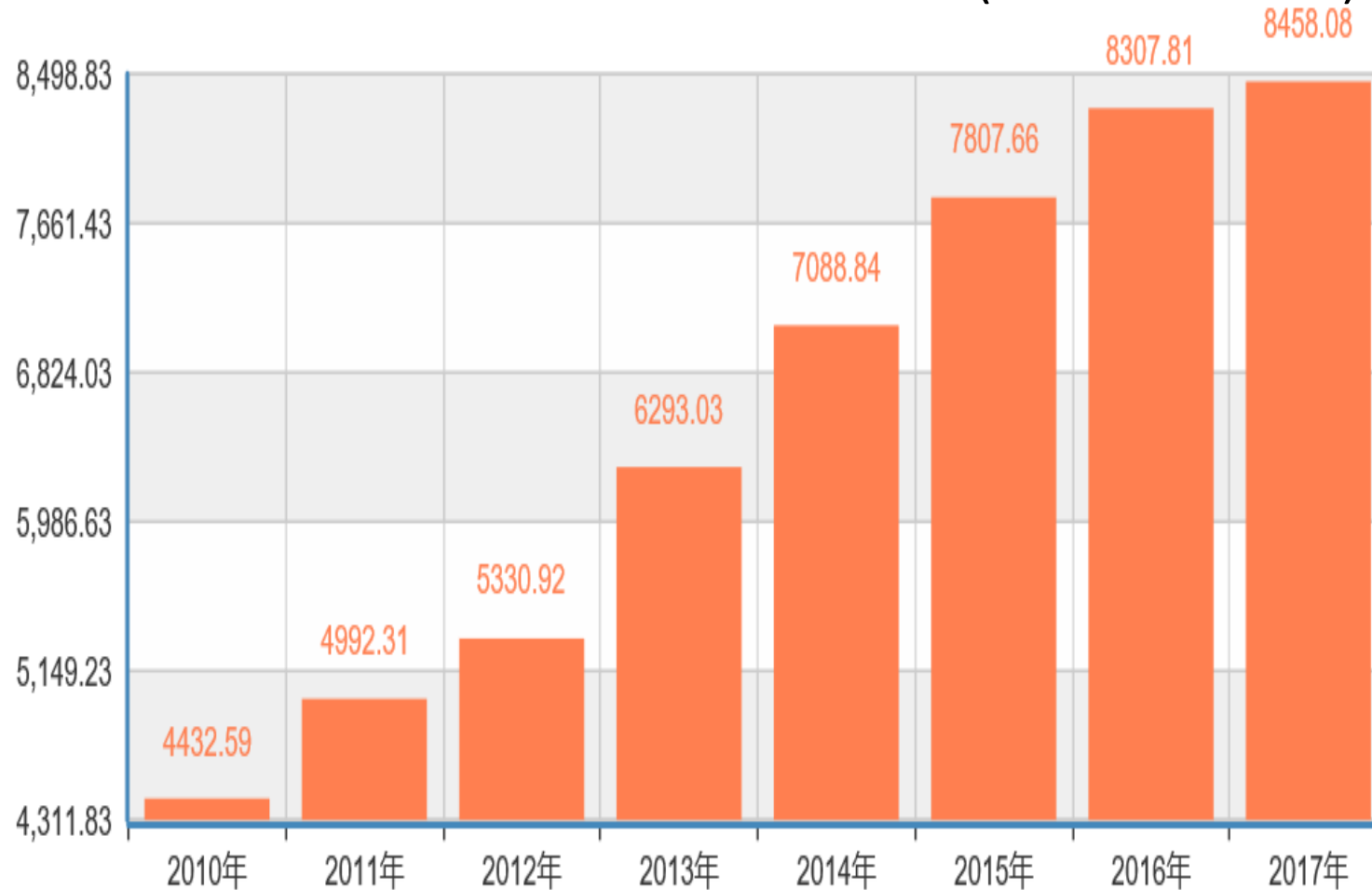
EU Action: CE Strategies on Plastics

International : Revise basel Convention Suggestion

Global commitment of business and Alliance

中国塑料产量 (2010-2017)

Plastic Production of China (2010-2017)



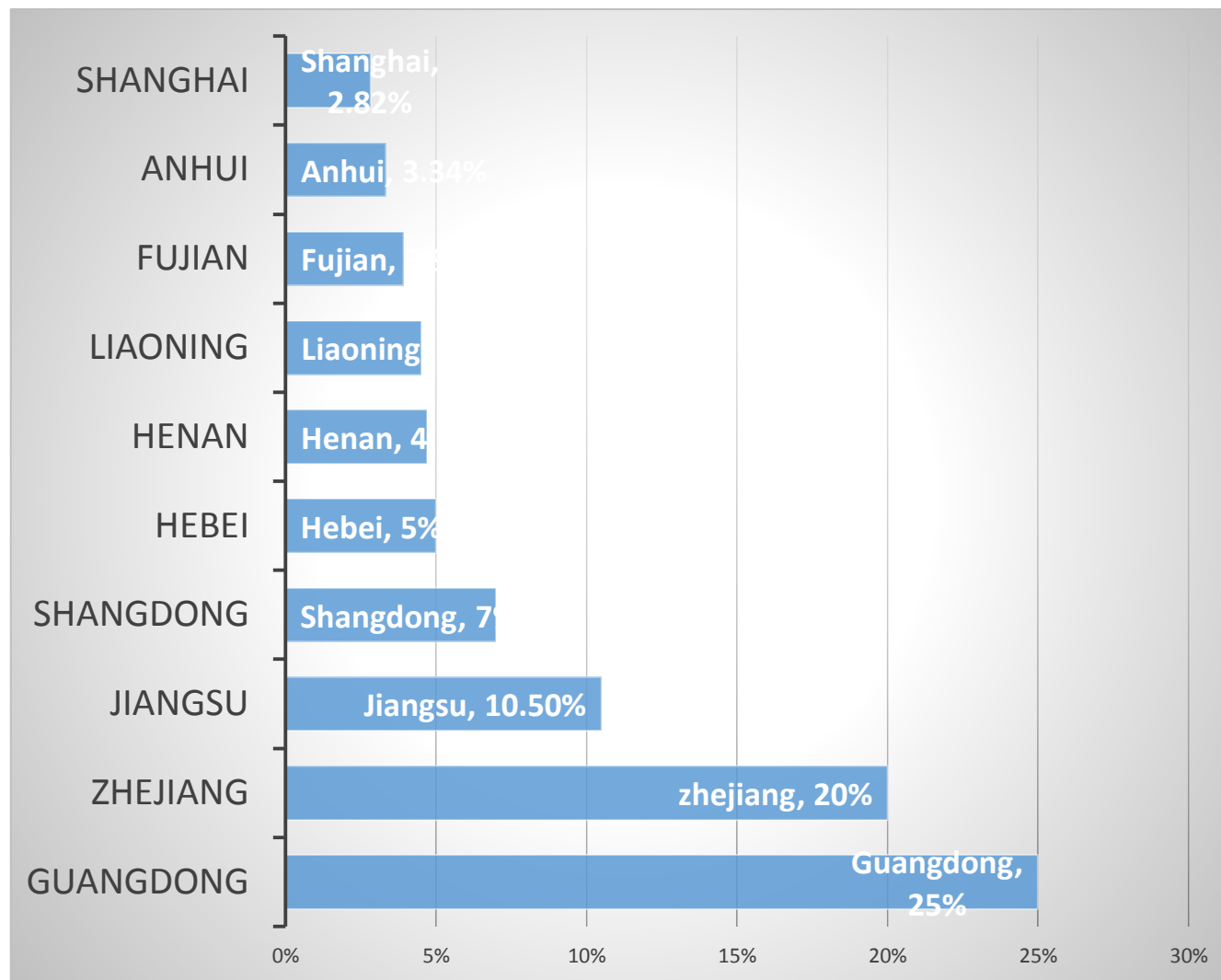
初级形态的塑料产量(万吨)

中国作为最大的塑料生产国，产量占世界总产量的1/4

China is the largest country in plastic production, which is 1/4 of world production.

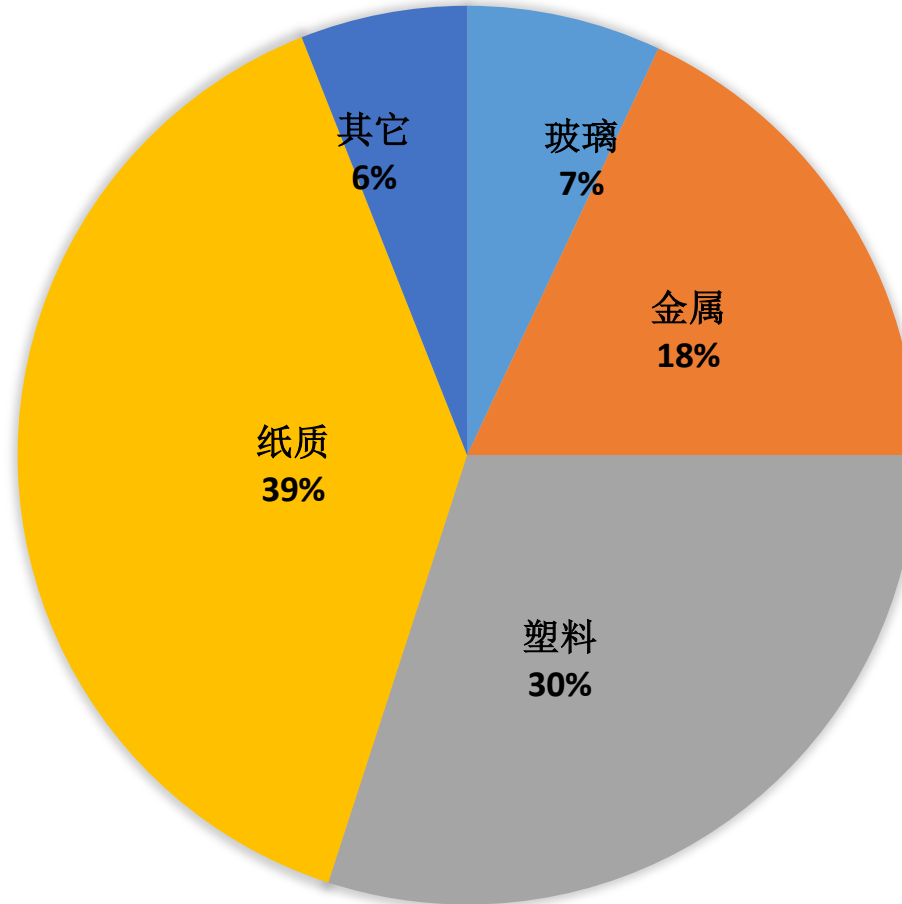
中国塑料产量的各地区分布

Distribution of Plastic Production in China



东南沿海地区是主要的塑料产生地
East coast is the main plastic production

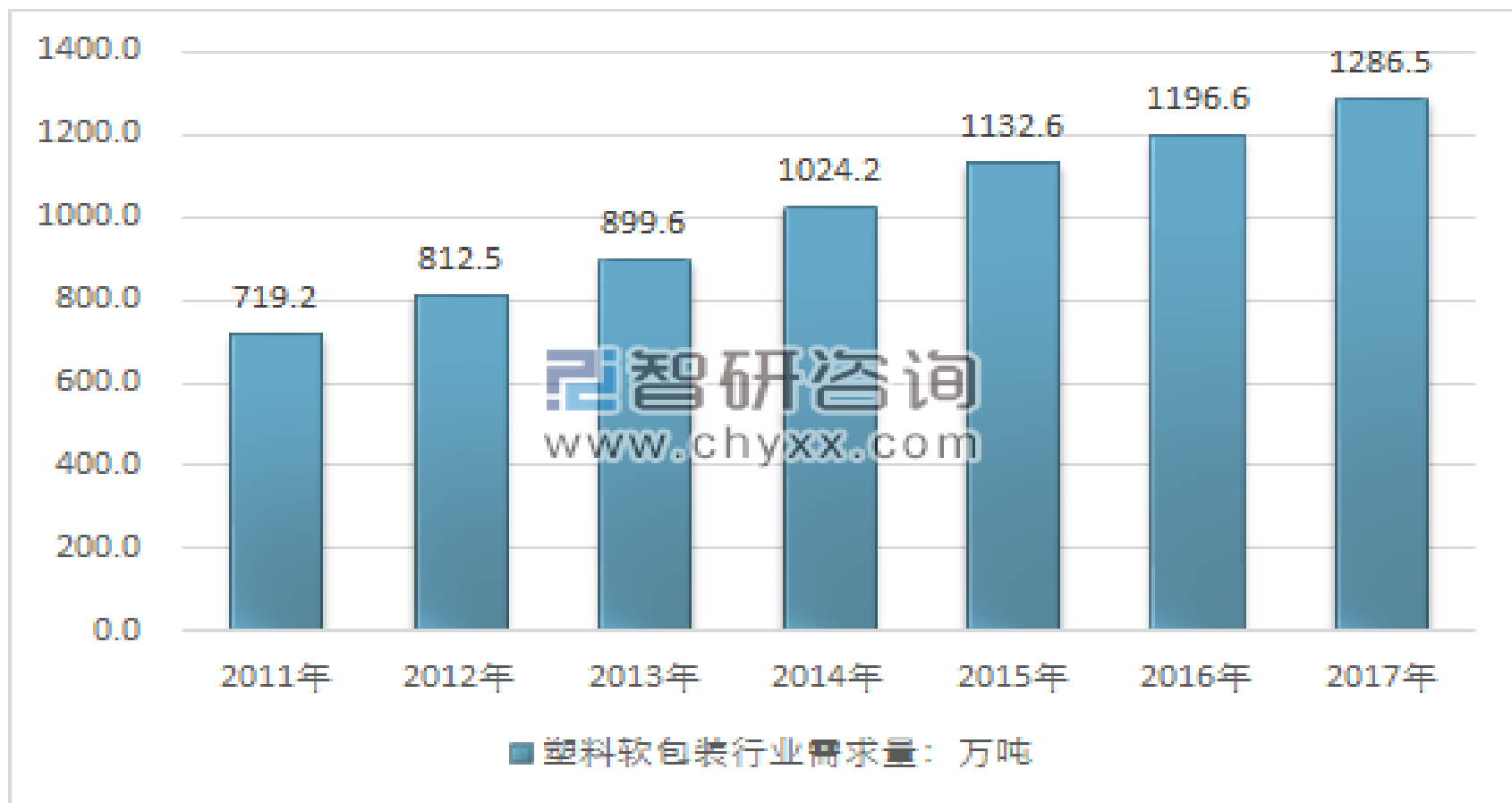
塑料包装在所有包装材料中所占比重：
Packaging Plastics in all Packaging Materials:



- 塑料包装接近包装行业产值的50%。
- 塑料薄膜占塑料产量的20%，是产量增长最快的材料之一
- Plastic packaging is close to 50% of the total value of packaging industry.
- Plastic filming is 20% of plastic proudction, which is one of the fastest growing material.

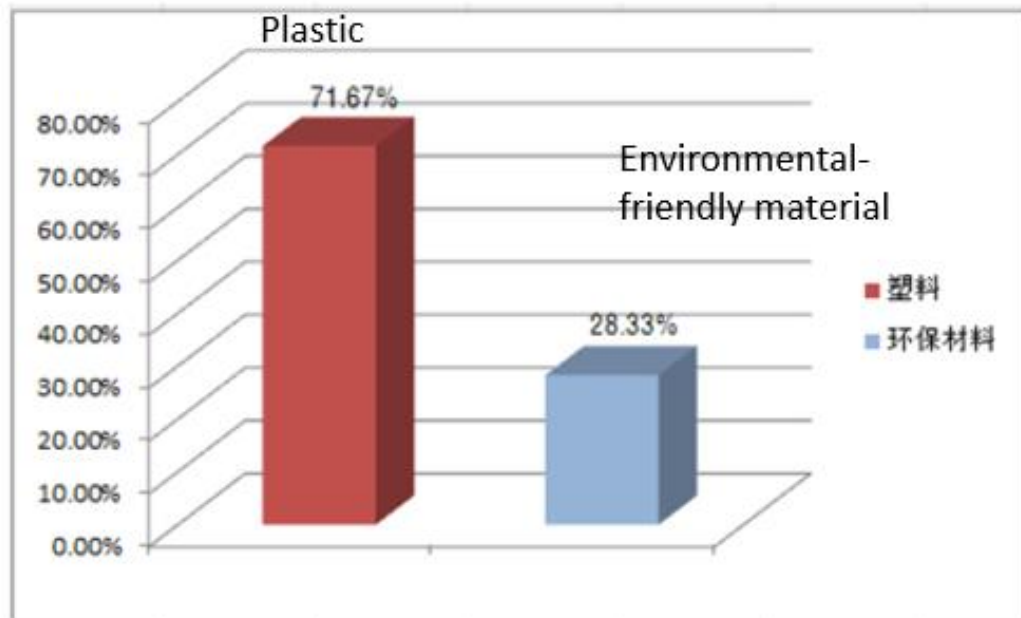
塑料软包装产量 (2011-2017)

Plastic Soft Packaging Production (2011-2017)



塑料市场分布:

Market Distribution of Plastics:



Plastic: PP, PET, PS, PVC, BOPS, PE

■ 塑料: PP PET PS PVC BOPS PE

■ 环保材料: 纸制品、淀粉基、PLA

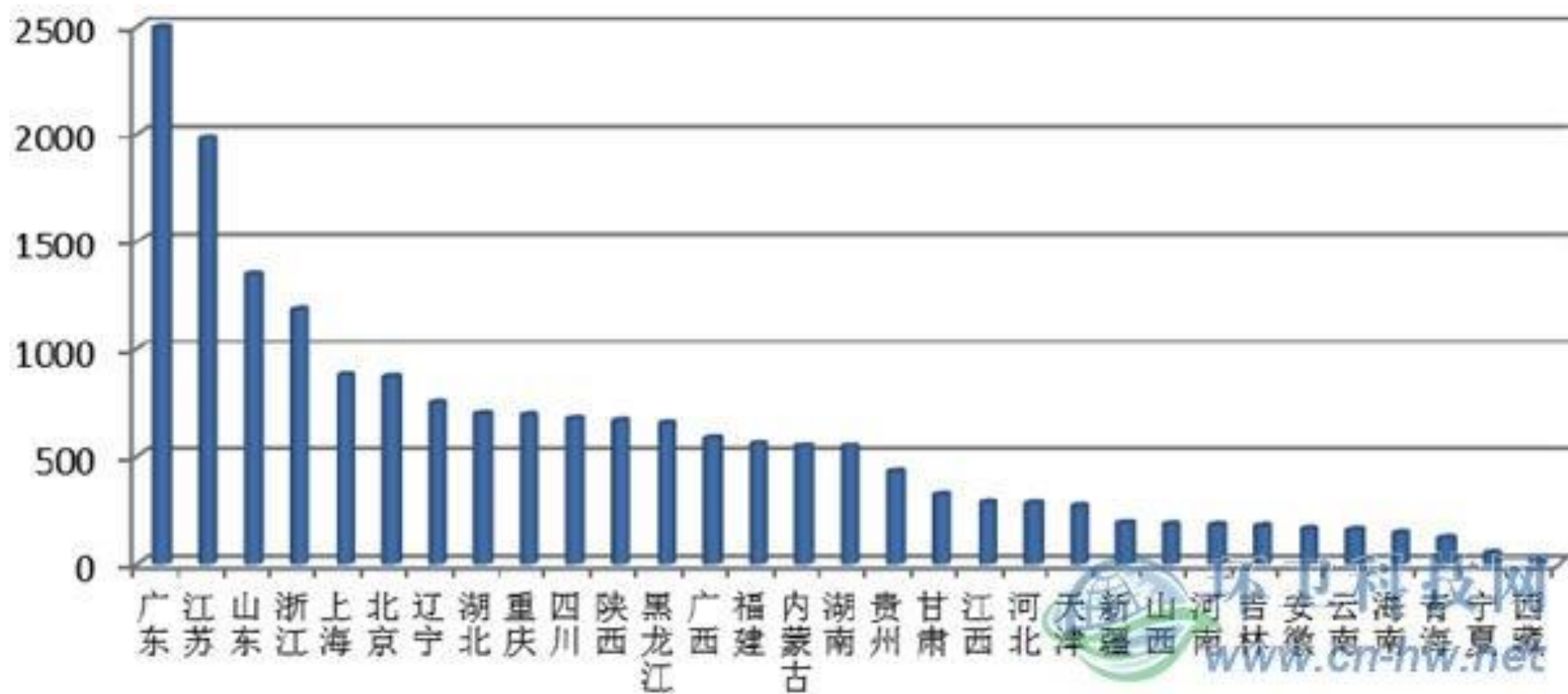
Environmental-friendly material: Paper-made, starch-based, PLA



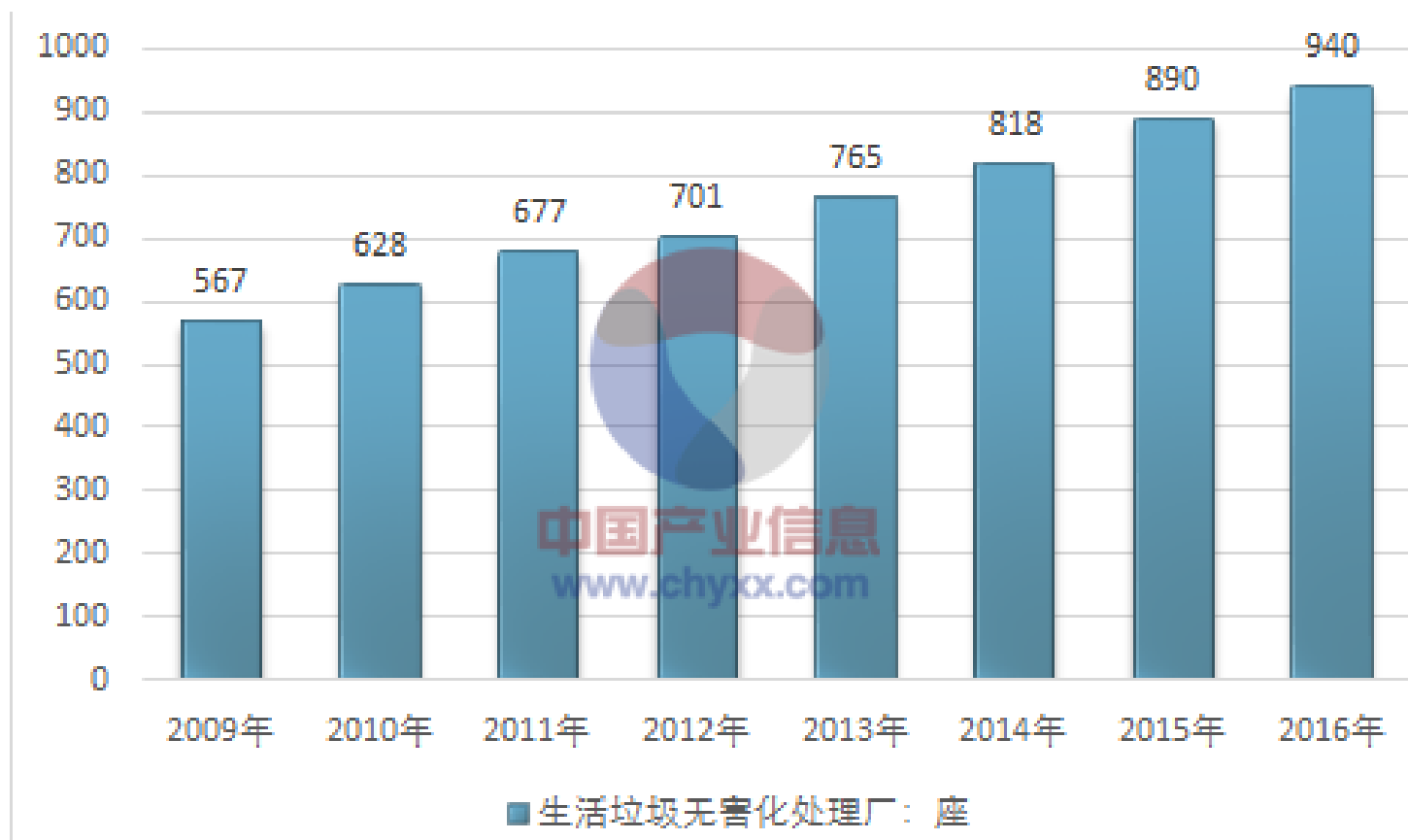
城市垃圾产量 (100,000t): City Waste Produced (100,000t):



2015年各省/市城市垃圾产量 (100,000t)\ The Municipal Waste Produced in each Province/City in 2015 (100,000t)



中国垃圾焚烧厂数量： Waste Incineration Factories in China



一次性塑料：
Single-Used Plastics:

PET(1.5mt)

个人护理瓶
Personal care Bottles

物流、外卖
Logistics, Delivery

编织袋
Waven Bags

农用薄膜、农药瓶(2mt)
Agricultural Film
Pesticide Bottle(2mt)

塑料袋
Plastic bags

回收PET瓶所遇到的困境: Problems of recycling PET bottles:

- 外包装没有行业标准
- 过度包装
- 混合材料难以分离
- Label materials has no standards
- over-packed
- mixed material hard to separate



Difficulties for recycling:

1. 回收系统没有进行有效的分类;
2. 品质低劣, 混乱不堪;
3. 现有技术无法达到100%的回收;
4. 种类和技术没有标准;
5. 成本高昂, 收益有限

1. Recycling system is not well sorted;
2. Bad qualities and mixed;
3. Current technology can not meet 100% recyclable;
4. No standards on category, and technology;
5. Profit is less and cost is high

中国塑料回收的发展:

Plastic Recycling Development in China:

该行业正处于升级转型阶段/The sector is in its upgrading transition

1. 2018年中国总的废弃塑料达到4500万吨, 仅仅回收了1700万吨, 占比 37.8%。

可回收塑料材料短缺, 价格激增。

2. 回收制造商的产能是有限的而且家庭作坊式的商业模式在逐步被淘汰, 现在回收部门主要是MSME。

3. 现在大型企业都聚焦于中国, 开始逐步收购中国企业。

4. EPR或闭环对行业的要求很高, 而我国缺乏这种闭环, 相应的回收系统也没有建立。

1. In 2018, China total waste plastic is 45 m tons, recycled 17 m tons, 37.8%.

Recycled plastics material is in shortage, and price rises

2. Capacity of recycling manufacturer is limited, and family-size business is phasing out, and recycling sector is mainly MSME

3. Giant enterprises are focusing to China, and start to purchase some Chinese companies

4. EPR or closed-loop is demanding from sector, and there is lack of such loop, and recycling system is not built in China



欧盟生产者责任延伸制（EPR） 经验

PPWD: Packaging and Packaging Waste Directive
包装和包装废弃物指令
(1994)

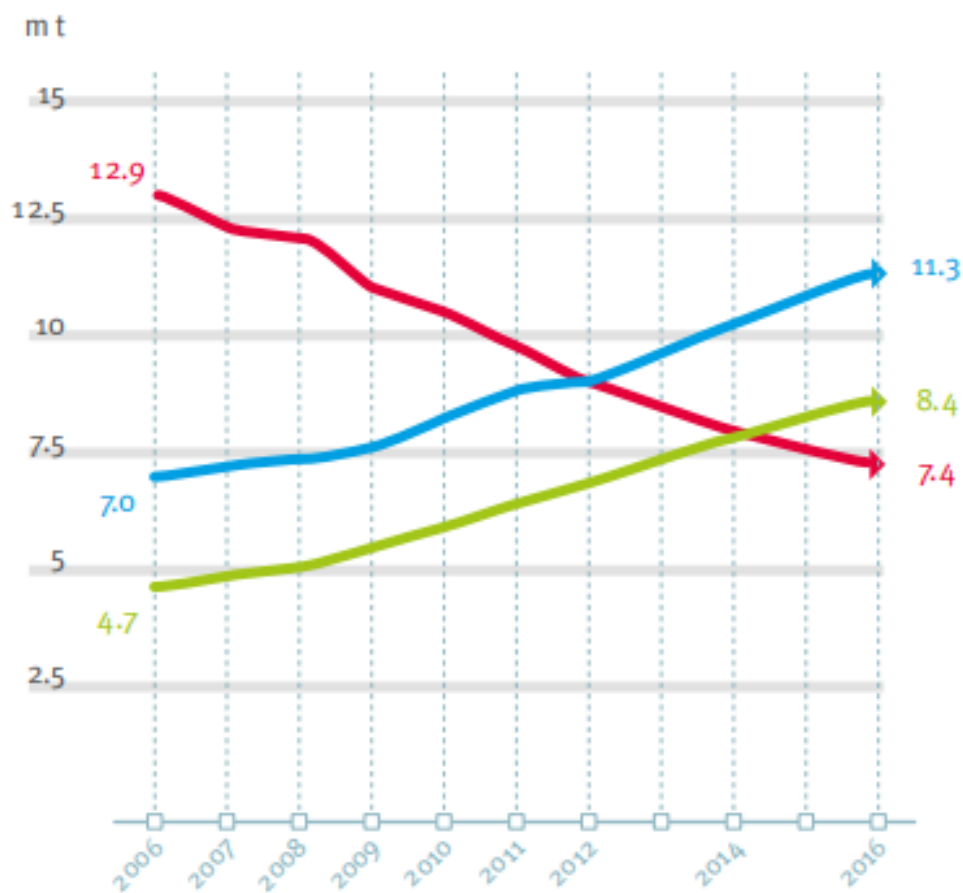
回收率目标? => 循环经济

PPWD: Packaging and Packaging Waste Directive (1994)

Recycling Rate Target ? => Circular Economy

欧盟塑料废物处理

2006-2016 evolution of plastic waste treatment (EU28+NO/CH)



 Recycling **+79%**

 Energy recovery **+61%**

 Landfill **-43%**

Total waste collected  2016: 27.1 mt
2006: 24.5 mt **+11%**

数字一览

- **25**个欧盟国家已经在治理国家包装废物的政策中实施了EPR。
- 产生污染的企业每年大概要支付**310万**欧元的费用。同时对于非工业的包装物，欧盟也在考虑将其纳入EPR中。
- 在1998年欧盟15国的包装物回收率在**47%**
- 在2012年欧盟27国的包装物回收率在**65%**

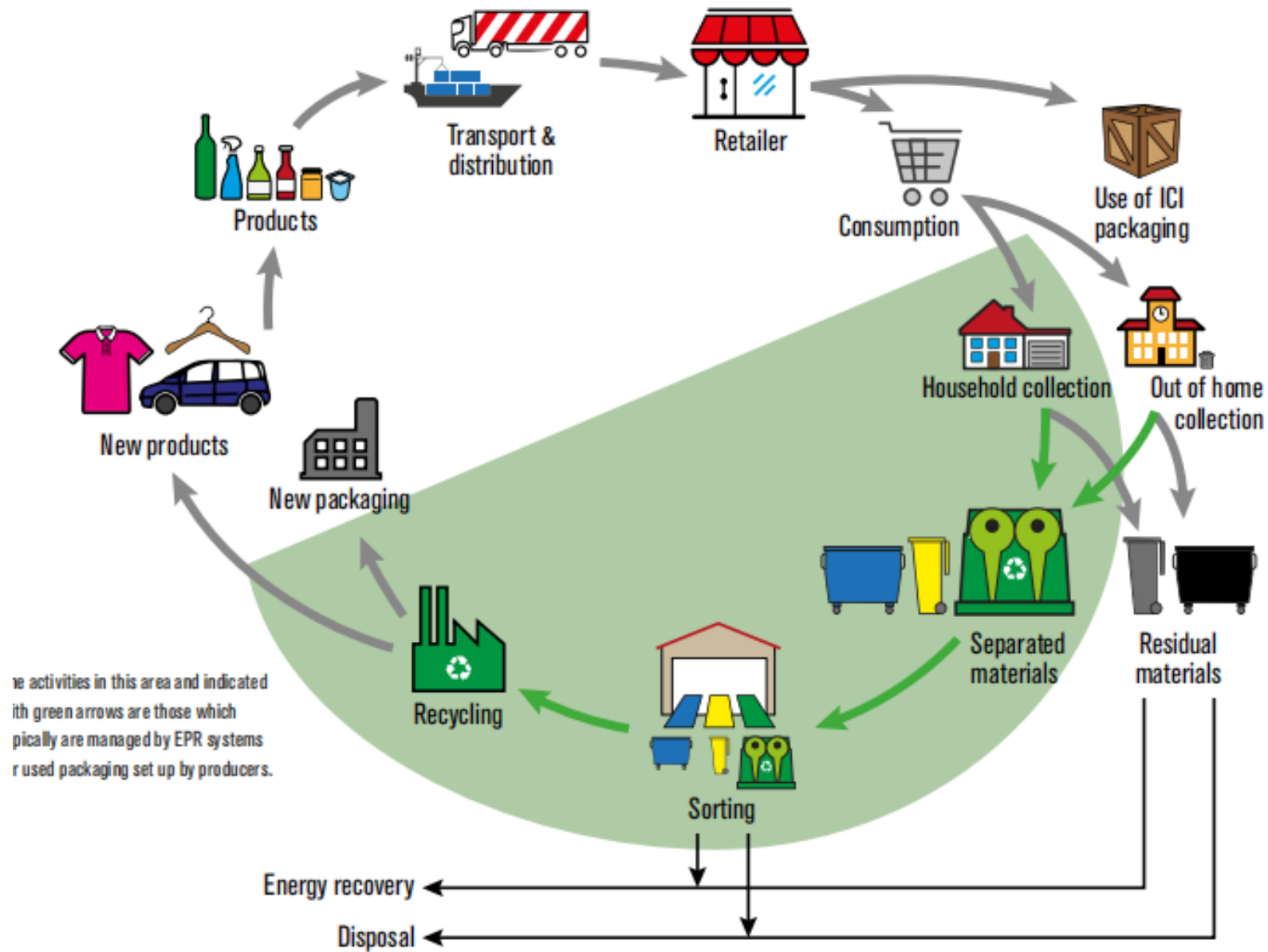
NUMBERS AT A GLANCE

25 EU Member States have implemented EPR in national packaging waste policies

€3.1 BILLION of estimated annual fees² paid by producers to industry and non-industry owned packaging EPR schemes in Europe

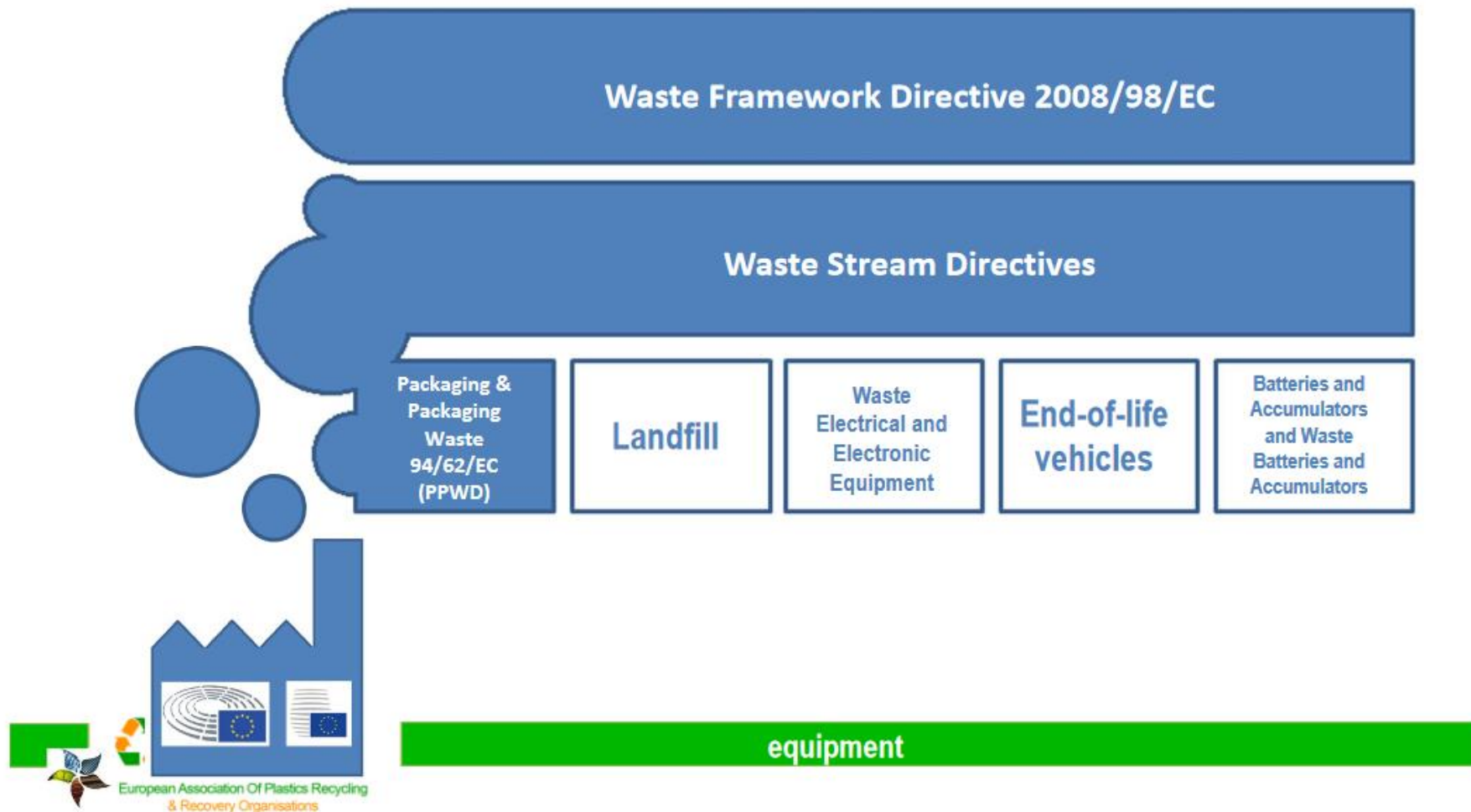
47% Packaging recycling rate in the EU-15 in 1998³

65% Packaging recycling rate in the EU-27 in 2012⁴



LEGISLATIVE PROPOSAL REVISING EU WASTE DIRECTIVES

修订欧盟废弃物指令的法规框架



构建闭环

