

Throwing 1 plastic or plastic bag, you are killing 1 life?

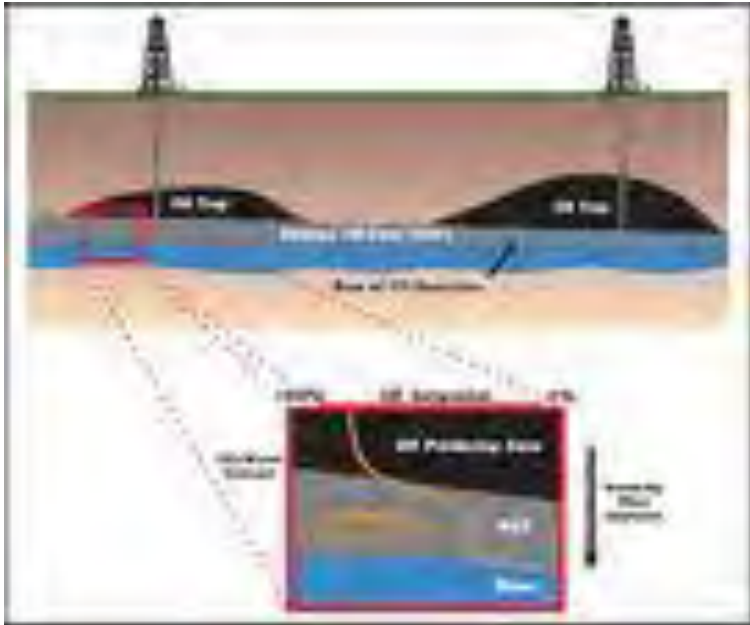
**丢弃一个塑料或塑料袋，
等于杀害一个生命？**

1 源起

塑料是 石油制造的

Plastic made from :

natural gas or petroleum



2 种类

Type of Plastic



聚乙烯对苯二甲酸酯

•PET or Number 1 Plastics – These are plastics made up of Polyethylene Terephthalate and include water bottles, and containers for soft drinks, jam and butter jars. The plastics falling under this category of plastic recycling codes are very tough and resistant to moisture.

•矿泉水瓶，碳酸饮料瓶.果酱瓶等.





●矿泉水瓶，碳酸饮料瓶。温度达70° C时易变形，且对人体有害的物质融出。1号塑料品使用10个月后，可能会释放出DEHP。DEHP是一种环境荷尔蒙，可能致癌。不能晒太阳,不能装酒、油。

Say no to bottled water



tap
water
is, on
average,
500 times
cheaper than
bottled water.*
**boycott the
bottle.**

*The Chartered Institute of Water and Environmental Management (CIWEM) - Faking About Bottled Drinking Water - November 2005





高密度聚乙烯



- **PE-HD or Number 2 Plastics** – These are plastics made up of High Density Polyethylene and include milk and juice bottles, shampoo bottles and water pipes. The plastics falling under this category of plastic recycling codes are resistant to moisture and permeable to gas.
- 白色药瓶、清洁用品、沐浴产品。





聚氧乙烯

PVC or Number 3 Plastics – These are plastics made up of Polyvinyl Chloride and include cling films, PVC pipes and certain juice bottles. The plastics falling under this category of plastic recycling codes are easy to blend and well suited for tough conditions. These plastics are usually **not recycled** as it is usually very expensive to recycle with the current technology. Moreover, there may not be enough of such items to justify their recycling.

雨衣、水管、塑胶杯。高温时产生有害物质，某些国家已逐步禁用





低密度聚乙烯

LDPE or Number 4 Plastics – These are plastics made up of Low Density Polyethylene and include frozen food bags, bread, shopping bags and tote bags. The plastics falling under this category of plastic recycling codes are easy to seal and fairly resistant to moisture. These plastics are usually **not recycled** as part of the curbside recycling programs.

薄塑料袋、保鲜膜、塑料膜等。
高温时产生有害物质



聚丙烯



PP or Number 5 Plastics –

These are plastics made up of Polypropylene and include kitchenware, medicine bottles, diapers, straws and syrup bottles. The plastics falling under this category are resistant to heat and chemicals and offer good resistance to moisture.

豆浆瓶、果汁饮料瓶、优酪乳瓶、微波炉餐盒，高达167° C，是唯一可以放进微波炉的塑胶瓶。





聚笨乙烯

PS or Number 6 Plastics - These are plastics made up of **Polystyrene** and include CD cases, disposable kitchenware, meat trays and egg cartons.

保丽龙、碗装泡面盒、快餐盒、不能放进微波炉。





PS



cannot be recycled



The white coffin

polystyrene foam

Long term use of Styrofoam
Increases the risk of getting cancer

* Styrene is a possible
human carcinogen **

Operation Green Box
Campaign to Stop using Styrofoam

Free@30pcampus.com | 507.255.1111

其他

Other or Number 7 Plastics - These are plastics made up of Polycarbonate or Acrylonitrile butadiene styrene and include some water bottles, DVDs, nylon substances, baby milk bottles and various types of electronic casings. These are traditionally **not recycled** .

水壶、太空杯、奶瓶。这种材质的水杯很容易释放出有毒物质双酚A,对人体有害。使用这种水杯时不要加热,不要在太阳下晒。



小心使用1、3、6、7

包书塑料，有些不能再循环。

Plastic wrapping book, cannot be recycled







Can not be recycled



11/09/2010 09:26

3 塑料的 ” 寿命 “

Life spend

- 塑料不会 “消失”，它只是粹成几万片，不能分解。有的须花100年或1,000 年分解，
- Plastic can not be disappear, it break into million small pieces but can not biodegradable, some take 100 years or even 1,000 years



4 塑料的祸害

Harmful of plastic

- 土埋 – 污染地下水 Landfill - pollution
- 焚烧 – 污染大气层 Burning - Dioxin
- 河流 – 阻塞 – 蚊虫疾病 Blocking - disease
- 丢弃 – 杀生-每日1万只鸟，鱼误食而死
- Everyday kill one million birds and fishes

土埋 - 汚染地下水

Landfill - pollution

After disposal of plastics in landfill, hazardous chemicals contaminate surface and groundwater



焚烧 - 污染大气层

Burning - Dioxin



河流 – 阻塞 – 蚊虫疾病 Drain Blocking - disease



河流 – 阻塞 – Blocking - disease



蚊虫疾病



Plastic debris on beaches



Trashes on high-tide line on our beaches



杀生 - 每日1万只鸟， 鱼误食而死
Everyday kill one million birds and fishes



Marine organisms ingest plastics

More than 180 species of animals are known to have ingested plastic debris, including **birds**, **fish**, **turtles** and **marine mammals**.

Physical impacts of the ingested plastics have been reported for many species of organisms (Wright et al., 2013).

Plastic fragments are dominant over resin pellets



- 死去的大鸟肚子有 **0.5lb** 的塑料
- **The dead birds found have 0.5 lb plastic inside stomach**

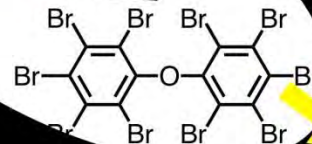






Transfer of chemicals from ingested plastics to biological tissue

Transfer of chemicals from ingested plastics to biological tissue has been confirmed.



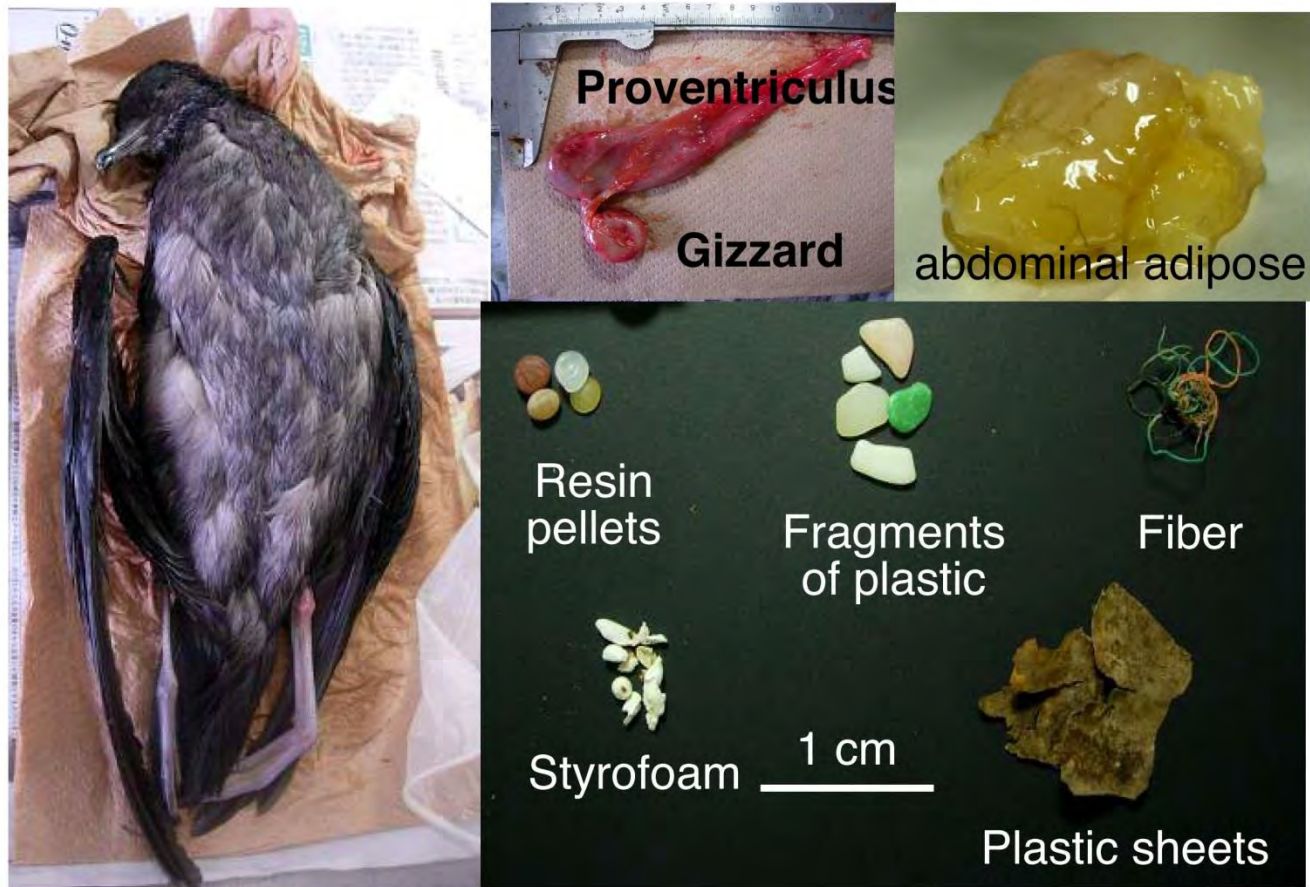
Biological effects concerned

e.g., endocrine disruption

reproductive failure

decline of species

Plastics in stomach of the short-tailed shearwater



- Amount of plastics found in stomach
- PBDEs concentrations in abdominal adipose



SOUTH ATLANTIC GYRE, AUGUST 2010



Photo from Dr. Charles Moore

**Microplastics accumulated in central gyre of the Pacific :
Plastics 6 times more than plankton**



别让海狮痛苦！ Suffer sea lion





On the usage of plastic food containers, you will be exposed to hazardous chemicals



No single-use plastics

Majority of plastics in marine environment is land-derived.
Disposable packaging is dominant item.

Reduction of input of single-use plastic from land is necessary.

3R

Reduce

Reuse : non-reusable plastics

Recycle : consumes energy and produces CO₂

No single-use plastic!

Say **NO** to plastic bags



5 減少使用 Reduce plastic bag 用布袋 Use Cloth bag



Reuse and Recycle

- 清洗，晒干，像衣服一样，重新使用或再循环



Wash, dry, like
cloth, reuse or
recycle





**Wash and dry,
recycle**

清洗，晒干。回收



停止使用 Stop using



- 感恩大地提供资源。不要为了自己的方便而增加地球的负担。
- Thanks the mother earth for giving resource,
- Your convenience is mother earth inconvenience.

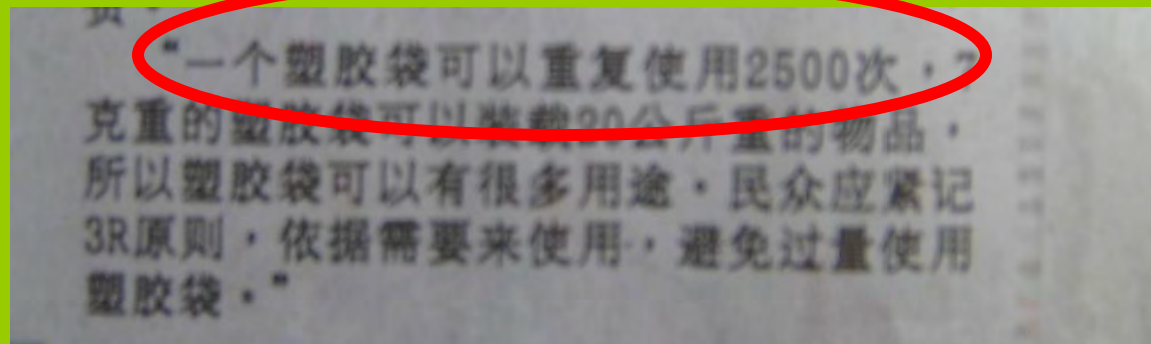
Please use basket and container
for take away food.

请用菜篮和提格打包。



6 重新使用 Reuse

- 一个塑料袋可以重复使用 2500 次。7 gm 重的塑料袋可以装20 kg 重的物品，依据需要来使用，避免过量使用塑料袋。
- One plastic bag can be reused for 2500 times ,7 gm of plastic bag can hold 20 kg item, use accordingly, avoid using too many plastic bag.



Wrong!

错误的方法



Correct!

正确的方法



Remove sticker



7 再循环 Recycle





11/07/2009 15:35

Recycle

再循环



Examples of Household Items



Recycling Plastic Process Flow



Crushing Process



Crushed product



Melting Process



Final Product



Shredding Process





КАПЕКА
ПРОПАЛ

КАПЕКА
ПРОПАЛ



Crushed Household Items



Mixed color plastics



Lunch box (No. 5)



Plastic bags

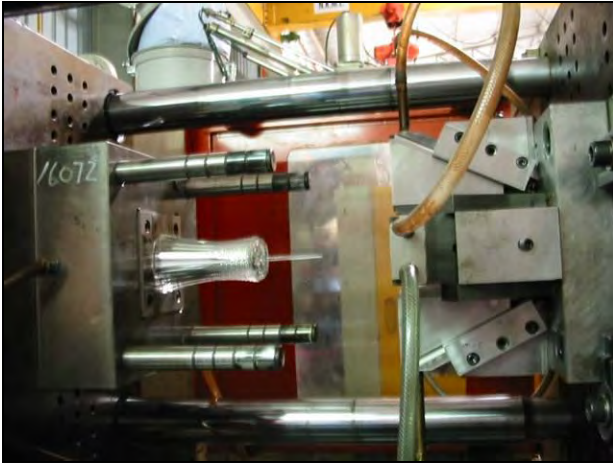


Wire

Final Materials (Raw Materials)



Raw Material Sold to Plastic Factory For making plastic product : cup, chair, dustbin etc....



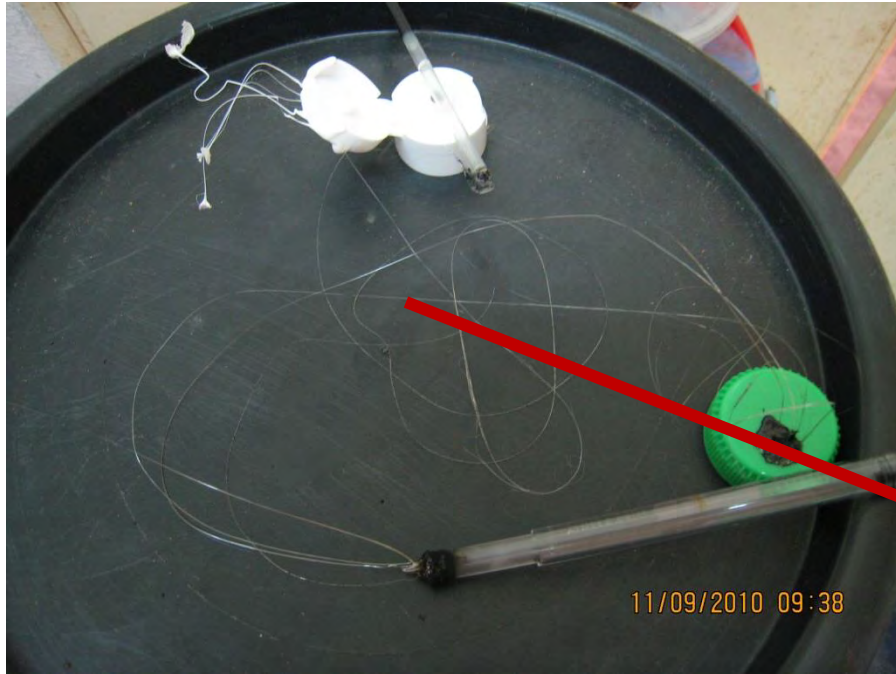


Raw Materials Sold to Plastic Bag Factory to produce plastic bag



Recycle 再循环

To make cloth and blanket
制作衣服和被单

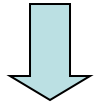


Do Not Leave the rubbish,
不要留下垃圾，



9。 Leave only foot print
只留下脚印





USE ONLY
ECO-FRIENDLY
BAGS

EARTH IS IN
DANGER DO NOT
USE POLYBAGS

PRO
ANIMALS

POLYTHENE
IS HARMFUL
FOR ANIMALS





"BAG? JUST SAY NO"

PLASTIC BAGS ARE...
ARLY!

SAY NO TO PLASTIC

SAY NO TO PLASTIC

PLASTIC BAGS ARE...
ARLY!

SAY NO TO PLASTIC

SAY NO TO PLASTIC

SAY NO TO PLASTIC

SAY NO TO PLASTIC

SAY NO TO PLASTIC

"FREE BAGS COST YOU!"



Friends of the Earth

Reduce SAY NO TO PLASTIC





1 Oct 2010 SK Kebun Sirih



14 Oct 2010
SMK Chung Ling



27 Oct 2010
SMK Mak Mandin



感恩，祝福你

Thank you