

International examples of household waste prevention

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## PRESENTATION STRUCTURE

- Background
- WP instruments
- WP case study - Austria
- Conclusions

WASTE PREVENTION - AIMING HIGH

A Resource Recovery Forum conference  
Barbican Centre, London  
Monday, November 20, 2009

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## International review

DEFRA HOUSEHOLD WASTE PREVENTION EVIDENCE REVIEW (WR1204)

INTERNATIONAL REVIEW OF HOUSEHOLD WASTE  
PREVENTION POLICIES & PRACTICES  
L3 mS/2(D) August 2009

Author: Kit Strange, Resource Recovery Forum

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BETTER PRODUCTION  
BETTER CONSUMPTION  
GREATER DURABILITY  
FEWER DISCARDS

>150 sources

30 experts/correspondents

documenting household waste prevention policy and practice in 20 countries, including:

- 15 EU states
- Australia
- Canada
- Japan
- New Zealand
- US.

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## International review

INTERNATIONAL REVIEW OF HOUSEHOLD WASTE  
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This report is structured as follows:

- **Section 1** is a summary of this review
- **Section 2** explains household waste prevention and places it within the context of current European Union environment policies. Additionally, some key facets of waste prevention are considered, including the iconic plastic shopping bag.
- **Section 3** reviews three initiatives undertaken across Europe, each geared towards stimulating real progress towards household waste prevention.
- **Section 4** compiles some twenty national profiles, focusing on countries that are active in household waste prevention

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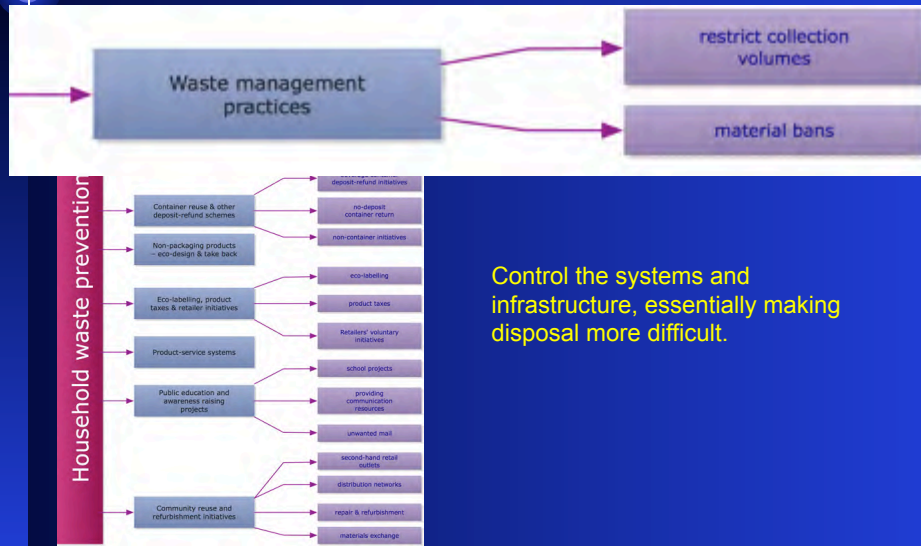
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## WASTE PREVENTION INSTRUMENTS



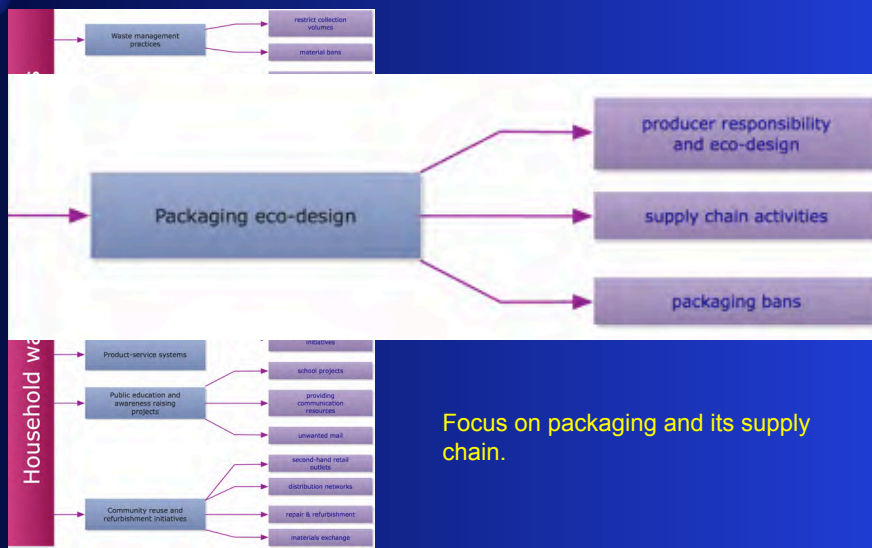
Enviros (2004) study offered a useful taxonomy of WP instruments.

# WASTE PREVENTION INSTRUMENTS



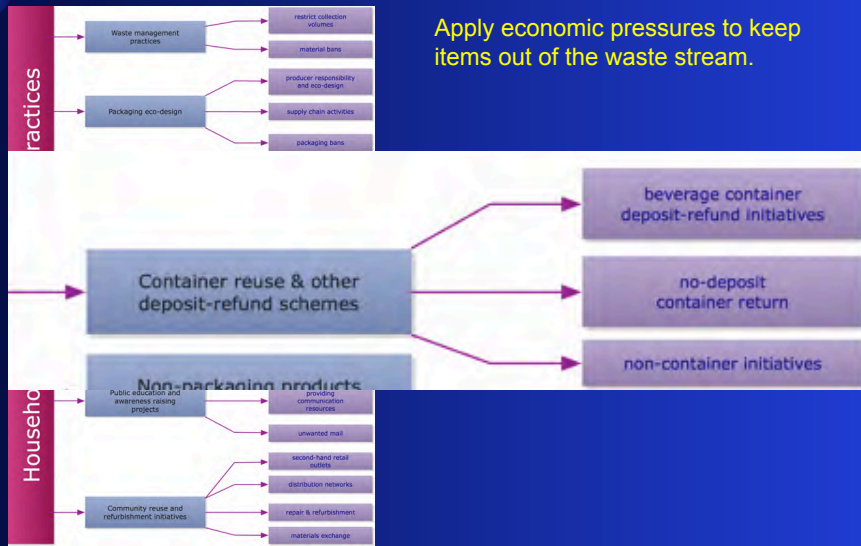
Control the systems and infrastructure, essentially making disposal more difficult.

# WASTE PREVENTION INSTRUMENTS



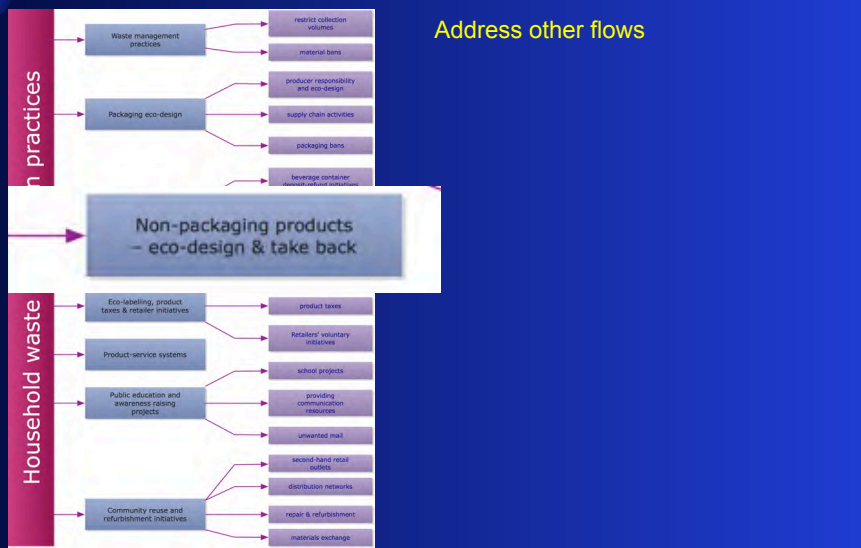
Focus on packaging and its supply chain.

# WASTE PREVENTION INSTRUMENTS



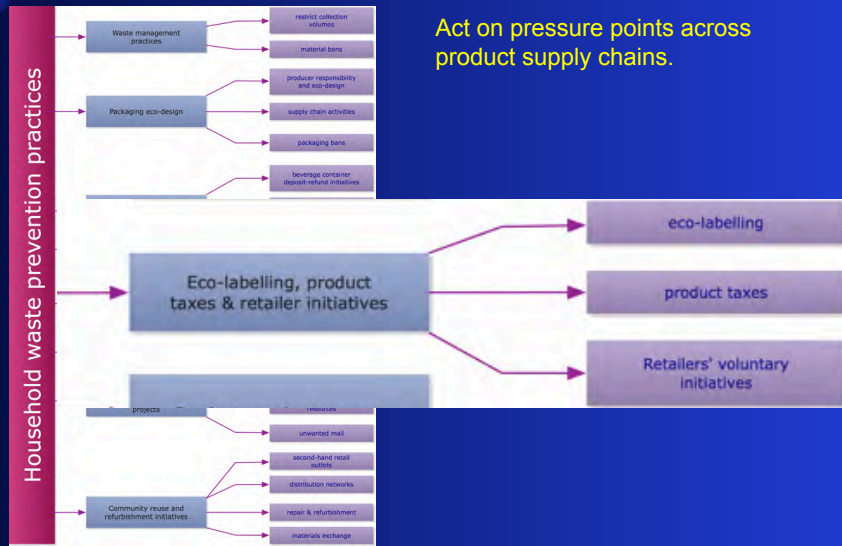
Apply economic pressures to keep items out of the waste stream.

# WASTE PREVENTION INSTRUMENTS

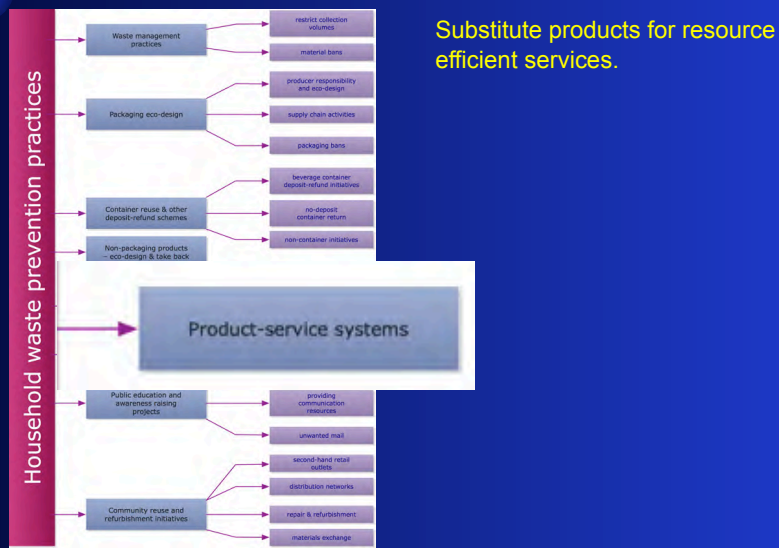


Address other flows

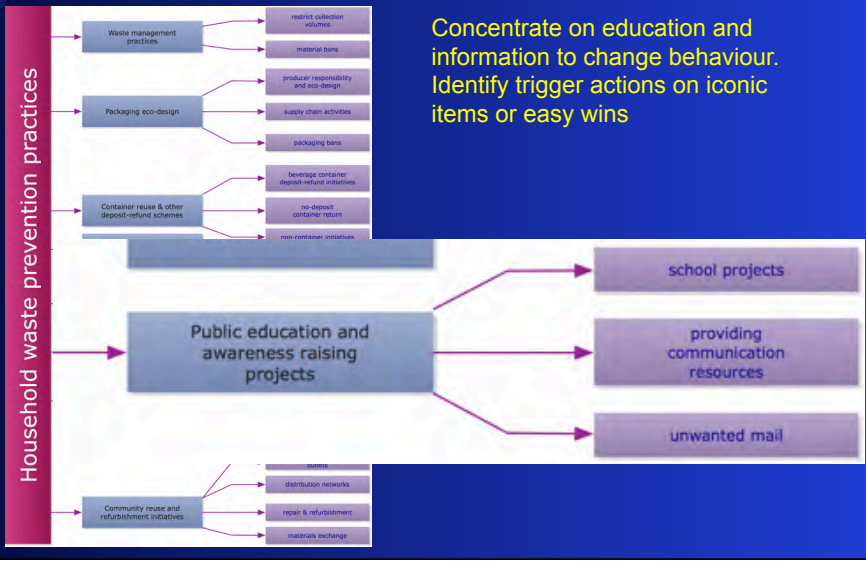
# WASTE PREVENTION INSTRUMENTS



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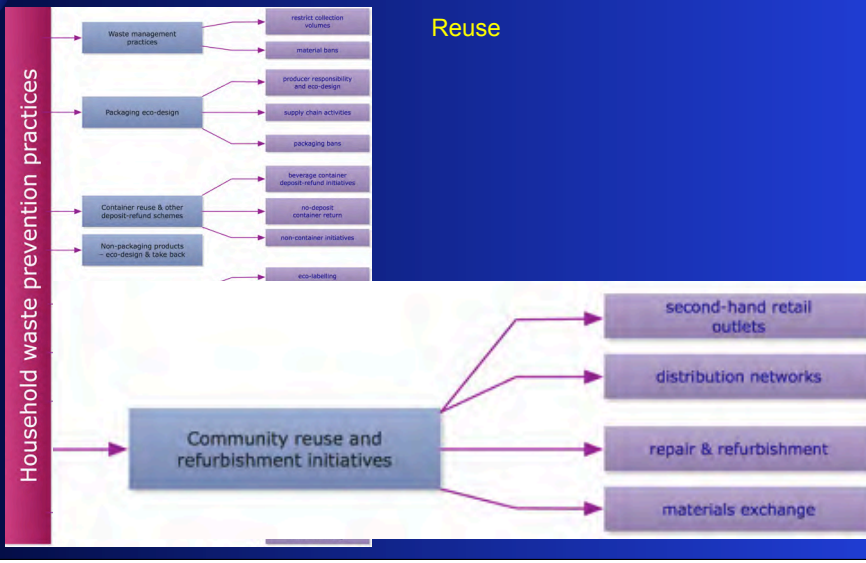


# WASTE PREVENTION INSTRUMENTS



Concentrate on education and information to change behaviour. Identify trigger actions on iconic items or easy wins

# WASTE PREVENTION INSTRUMENTS



Reuse

## Austria

Product-related waste prevention includes measures:

- that permit **multiple use of a product** or product components (by making it easier to take them apart),
- which **extend product life** and/or increase the ease of repair or
- which **change the form of a product** so that production waste, the volume of post-use waste and potential hazardous substances are reduced.

## Austria

Conclusions for the production/retail sectors:

- waste prevention and emission reduction can bring **economic benefits**
- **standardisation** is needed for additional prevention measures.
- a common international approach is required.
- the use of regulatory measures (such as the Packaging Ordinance) can lead to **innovation**.
- waste prevention can benefit companies by **improving their image**.
- improvements have been made in the prevention of hazardous substances.

## Austria

### Conclusions for consumers:

- measures that benefit the individual are more persuasive than vague, general appeals a sense of civic responsibility.
- in households, a greater level of prevention can only be achieved by a change in the value systems (reduced consumption of material goods).
- developments only become viable if 15 per cent of the population support them and if they involve a number of social groups.
- prevention measures must be affordable, comprehensible, practicable and attractive.

## Austria

Austria's Waste Management Act 2002 defines the framework for waste and recovery options in Austria:

- defines waste prevention and recovery as basic principles of Austrian waste management.
- requires waste prevention measures to be elaborated
- defines the targets and guidelines for sustainable waste prevention

## Austria

In the Waste Management Act 2002, the following targets are defined for the sustainable prevention of waste:

- products shall be **long-lasting** and easy to repair
- **distribution shall be organised** in such a way that the waste volumes generated are as low as possible (eg by deposit-refund systems)
- products shall be **designed** in such a way that the waste volumes generated during their production, use, and consumption are minimised and that the pollutant levels in waste products are as low as possible
- **products shall be consumed** in such a way that the environmental impact is minimised, in particular in terms of waste generation.

## Austria

Apart from public waste prevention and recovery measures, voluntary agreements of industry exist on a national level regarding the collection, recycling and removal of, amongst others:

- end-of-life vehicles
- used tyres
- PVC window frames and pipes
- beverage packaging
- quality recycled construction materials.

## Prevention in Provincial Waste Management Plans

The following waste prevention and recovery targets and measures are set out for the Austrian Provincial Waste Management Plans:

- tailor-made waste prevention campaigns are drawn up based on **residual waste analysis**
- promotion of **home composting**
- **encouraging the public** to take part in waste prevention
- extended use of equipment is promoted by publishing **repair, hire and second-hand manuals**
- public construction bodies act as **role models**
- introduction of EMAS (Eco-Management and Audit Scheme, a voluntary initiative) to help reduce business waste.

## Styria region

Under Styria regional legislation, waste fees collected by the local authority are required to be spent in part on measures for waste prevention. The provincial plan recommends a number of initiatives, including in the following areas:

- reusable bottles and cups
- reusable nappies
- environmentally friendly/fair trade product labels
- shopping baskets/durable reusable bags (not plastic 'bags for life')
- unpackaged fruit, farm shops, direct retailers
- cycling, public transport, car-sharing
- solar batteries, solar panels, renewable energy, conservation
- repairing, not disposal
- corn-starch products.

## Styria results.....

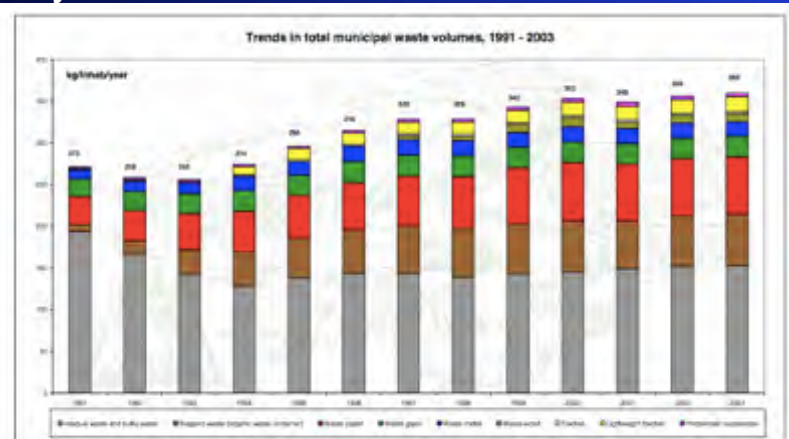


Fig. 5: Waste volume trends per inhabitant in Styria, 1991-2003, split according to individual waste types

## Styria results.....

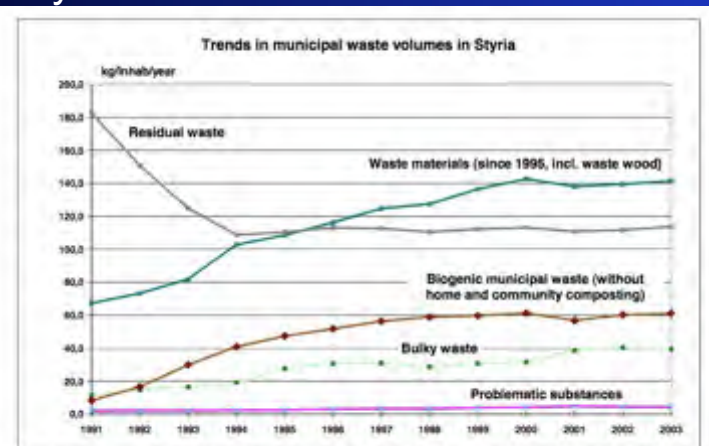
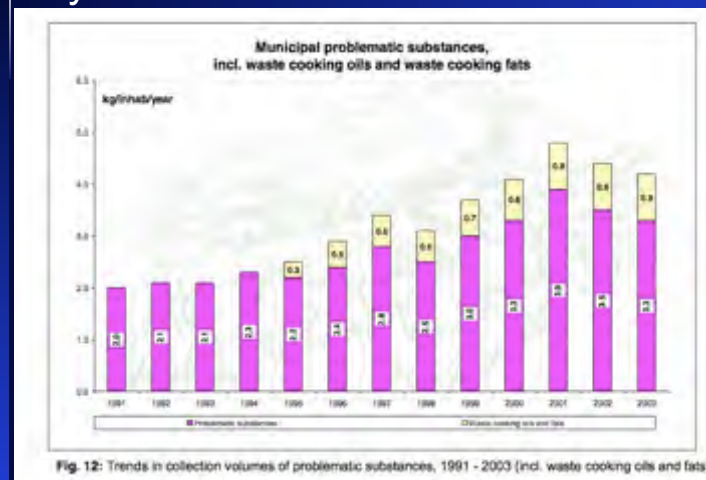


Fig. 6: Waste volume trends per inhabitant in Styria, 1991-2003, split according to waste types

## Styria results.....



## Styria results.....



## Styria results.....



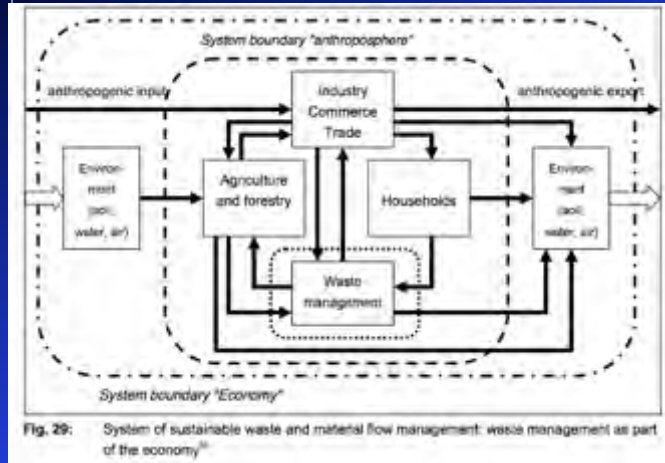
Fig. 13: Trends in collection volumes of waste cooking oils and fats, 1991 - 2003

## Case not proven, but trends looking good

Target for the year 2015 in Styria:

The transition from waste management to waste and material flow management is thoroughly embedded in the awareness of the public, the economy, and public administration.

## Case not proven, but trends looking good



The encouraging new perspective for the Styrian regional public authority.

## Conclusions

Waste prevention is increasingly incorporated into national, regional and local policy initiatives. There are clear legal definitions of waste prevention, although implementation is more vaguely defined, often expressed in terms of increasing recovery or decreasing landfill dependency.

Despite claims to the contrary, it is very difficult to demonstrate a consistent, direct link between specific policy instruments and measurable waste prevention achievements.

However, there is a body of evidence suggesting that a broad mix of waste prevention measures does deliver dematerialisation, detoxification and associated resource efficiency goals.

## Conclusions

Part of the difficulty in untangling the effectiveness of specific waste prevention initiatives lies in the high degree of interconnectedness between:

- any one measure and different parts of the relevant supply chain
- any one measure and different parts of the waste management hierarchy
- any one measure and the other measures applied at the same time.

Another complicating element in waste prevention is that it does not always guarantee environmental improvement.

## Conclusions

The most effective and most frequently applied suite of waste prevention instruments appear to comprise:

- waste prevention targets
- producer responsibility
- variable rate charging (pay as you throw) systems for householders' residual waste
- intense public awareness/communications campaigns
- public sector funding pilot projects
- collaboration between public, private and third sectors.

## Conclusions

A few European countries have taken early steps to embrace household waste prevention measures.

The elite group of nations in this regard would include Austria, Belgium and France.

There are also many interesting examples of relevant initiatives seen in Australia, Canada, Japan and New Zealand.

## Conclusions

Examples of the most effective WP ideas (apart from the policy initiatives listed above) gleaned from overseas experiences include:

- choose “emblematic” streams (eg plastic shopping bags, bottled water, home composting or junk mail) to lead the WP debate
- Explain the link between waste & sustainable consumption
- Make second-hand purchases and renting more the social norm
- Empower householders/consumers (eg LA 21)
- implement short-term specific campaigns and pilot projects, together with long-term awareness campaigns
- Target schools, offices and shops

Thank you

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