

An aerial view of the Earth, showing the continents in shades of green and yellow, with the oceans in black. The perspective is from a high angle, looking down at the planet.

Waste Recycling Duo

~ Negative Impacts from Trade Prohibitions ~

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Flow of the presentation

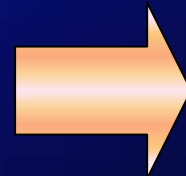
1. Japanese recycling law of electric appliances
2. Result of the law: decrease of 4million units
3. Reason of decrease : exports
4. Criticism against exports
5. Negative impacts from trade ban

Situation before introducing the recycling law



- Wastes collected by local governments mainly went to landfills.
- Recycling was not adequate.

The cost of collection and treatment was covered by tax



Invisible!!

Background of Electric Home Appliance Recycling Law

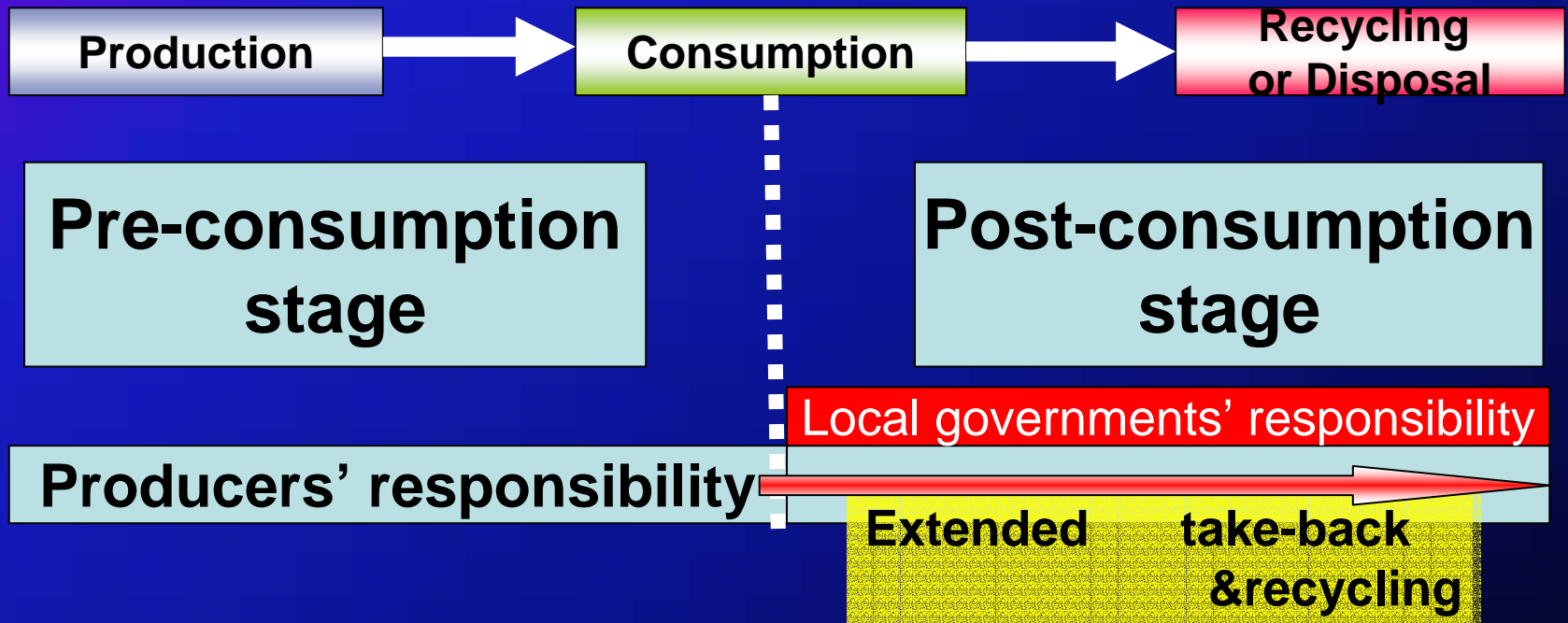
exhaustion of landfills

Efficient use of scarce
natural resources

Recycling became very important!!

What is EPR?

(Extended Producer Responsibility)




under EPR, take-back & recycling cost is paid
by not government but producers

What is EPR?

(Extended Producer Responsibility)

So, recycling cost is . . .

invisible  **visible**

EPR has impact on { **consumers' activity**
producers' activity

What is EPR?

(Extended Producer Responsibility)

Consumer

life

EPR promotes recycling!

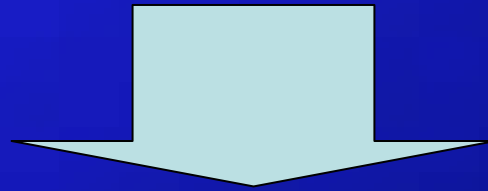
Product

responsible for
recycling

longer life products.

Why Electric Home Appliances?

Small percentages in the total weight of wastes



But, the importance of recycling arose ...

· **usefulness as metal resources**

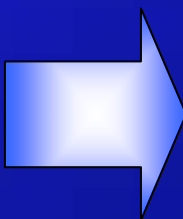
(including many useful metals)

· **harmfulness of hazardous substances**

(including mercury)

Contents of this law

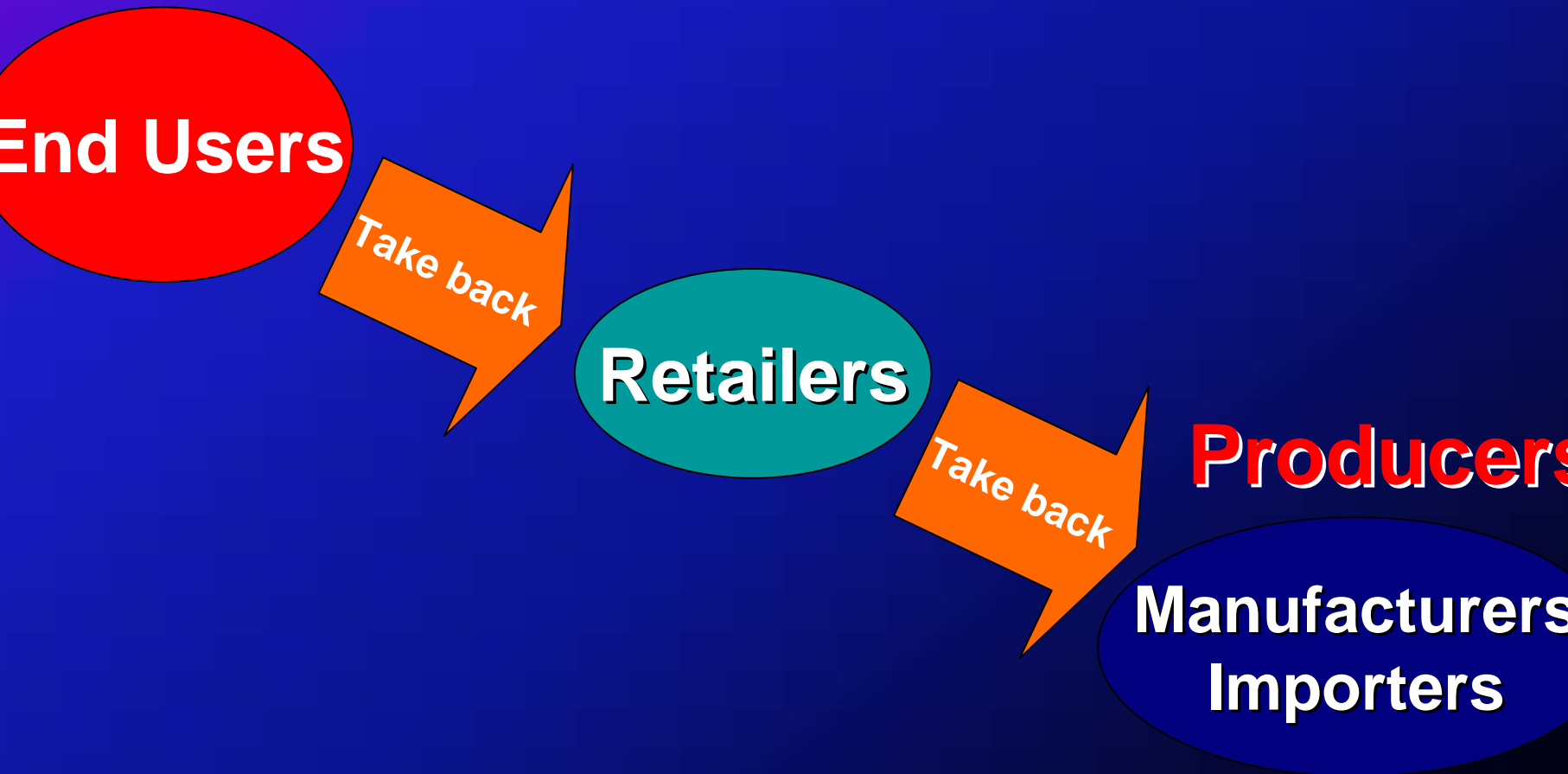
This law came into force on
1st April, 2001

Targets & Recycling rate		TV	washing machine
		refrigerator	air conditioner
		55%	50%
		50%	60%

producers **must** recycle over these rates

Contents of this law

flow of appliances



Role of each actor

End Users

- proper hand over
- payment for gathering and/or recycling charges

Retailers

- proper hand over to producers

**Manufacturers
Importers**

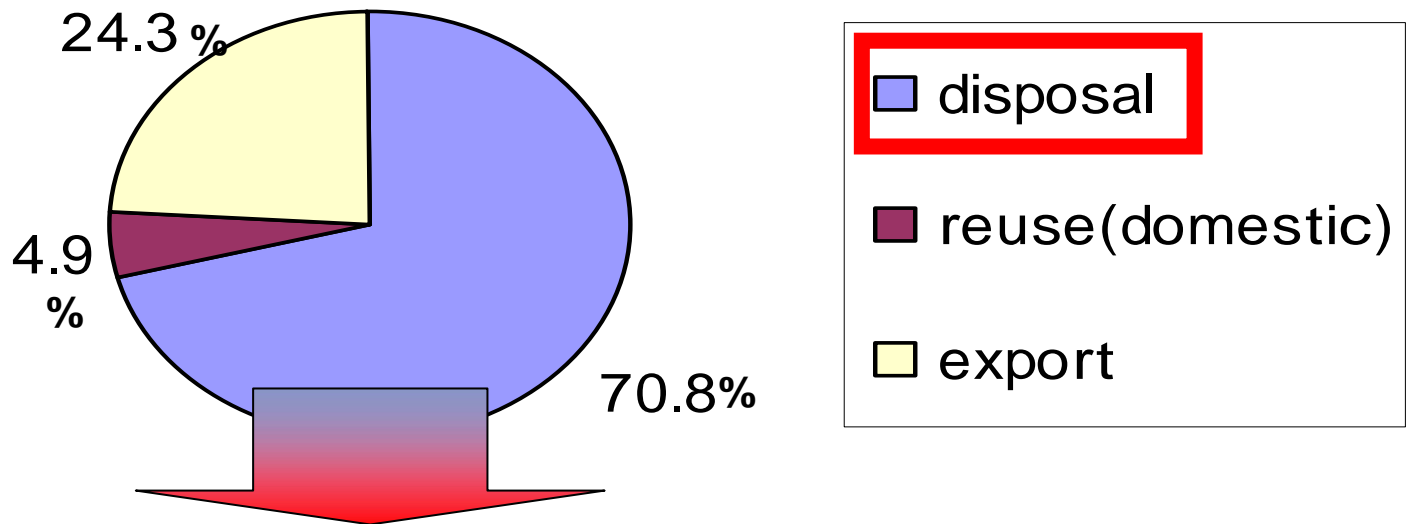
- proper recycling

I will show you the effect of this law

Before the enforcement of the law

ratio of units

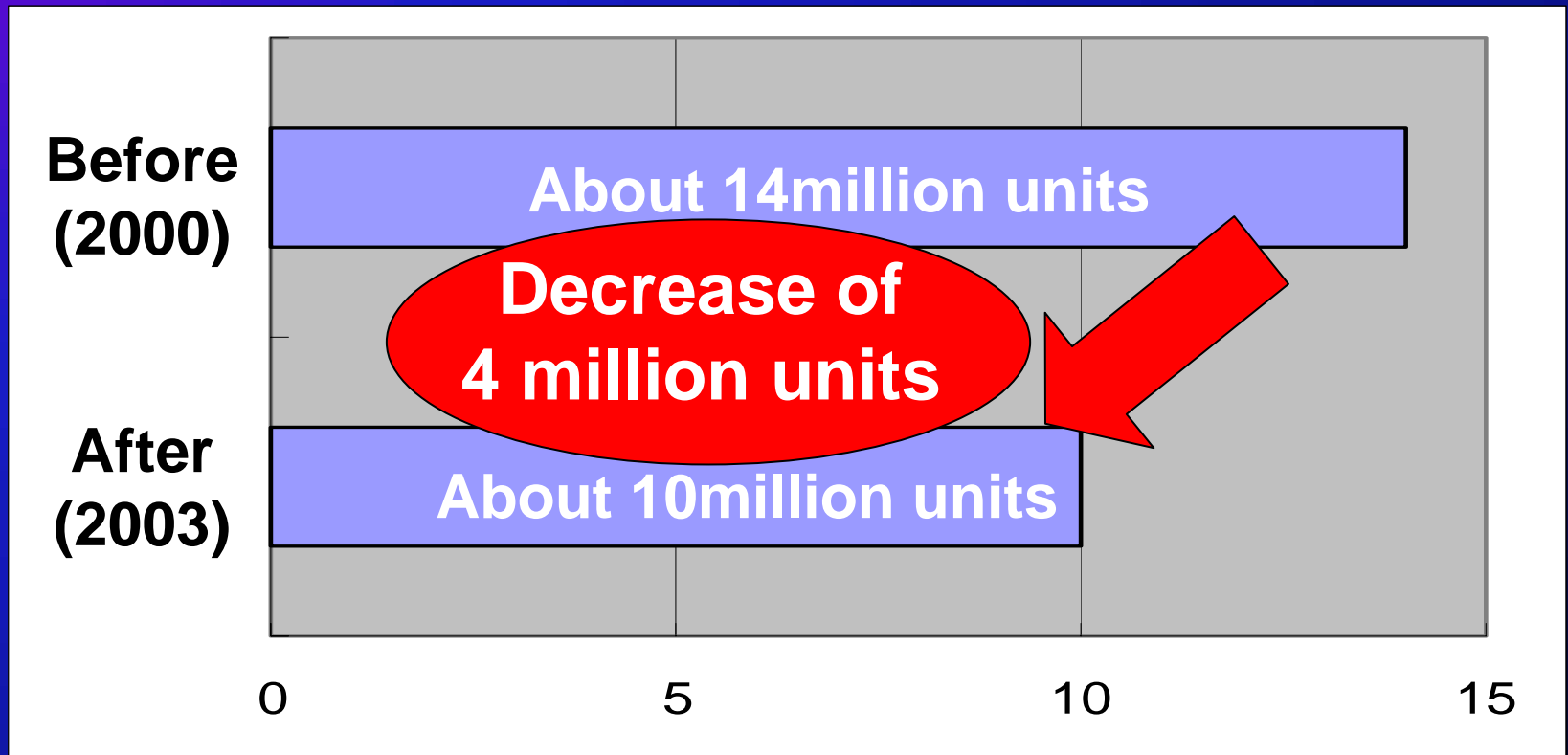
Total : 20.7million units



Disposal : About 14million units

In year 2000

Result of the law amount of collection



Source:METI

Why it decreased?

*exports seem to be the
main reason.*

The reason of the exports is...

Economic incentive !

Economic incentive

Recycling route



Reusing route



By taking reusing route,
consumers can get more profit.

Positive aspects of exports

exports

Decrease of potential disposal

Good point!

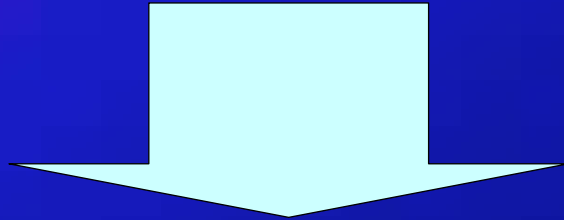
**Wastes
in Japan**

**Goods
in foreign countries**

Demand in foreign countries is bigger than that in Japan.

Wastes in Japan don't have any price, but they have some price in foreign countries.

Increase of exports



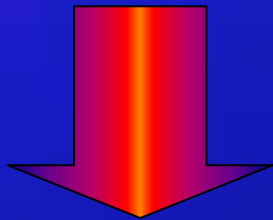
Efficient use of scarce natural resources.

but

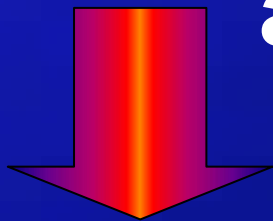
severe criticisms burst

Criticism against exports

Bad operations in some Asian countries



Strongly criticized by NGOs
and developing countries



**What kinds of operations
are being exercised?**

Insight from “Exporting Harm”



Source: <http://www.bon.org/index.html>

Chemical stripping operations



Serious contamination

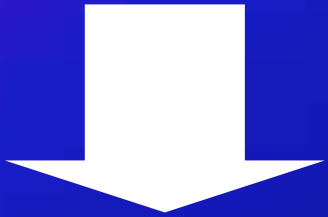


Open burning



Tragic state of treatments

Terrible treatments



Bad for

- Workers' health
- Surrounding environment

Actions for

Import ban

accelerated

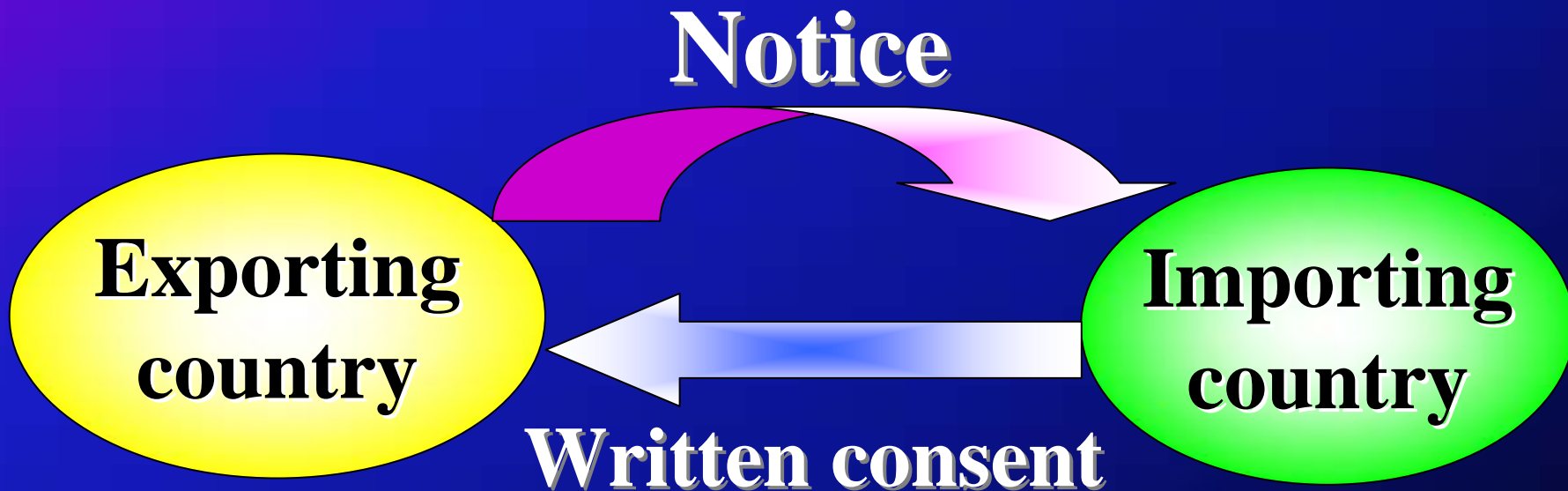
in Asian countries

Bad treatments **hamper**
positive aspects of export



Are there any international rules?

Basel Convention



Clarification of the location of hazardous wastes

Basel Convention

just a control

**justification
of the export**

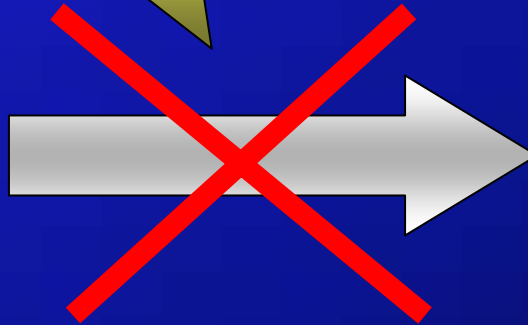


**Movement towards
the total ban**

Basel Ban Amendment

Forbidden

**Developed
countries**



**Developing
countries**

*What are the consequences
of the **Export ban** of
recyclable materials ?*

Negative
impacts for

- exporting countries
- importing countries

In Exporting countries

~by the example of television~

Japanese television

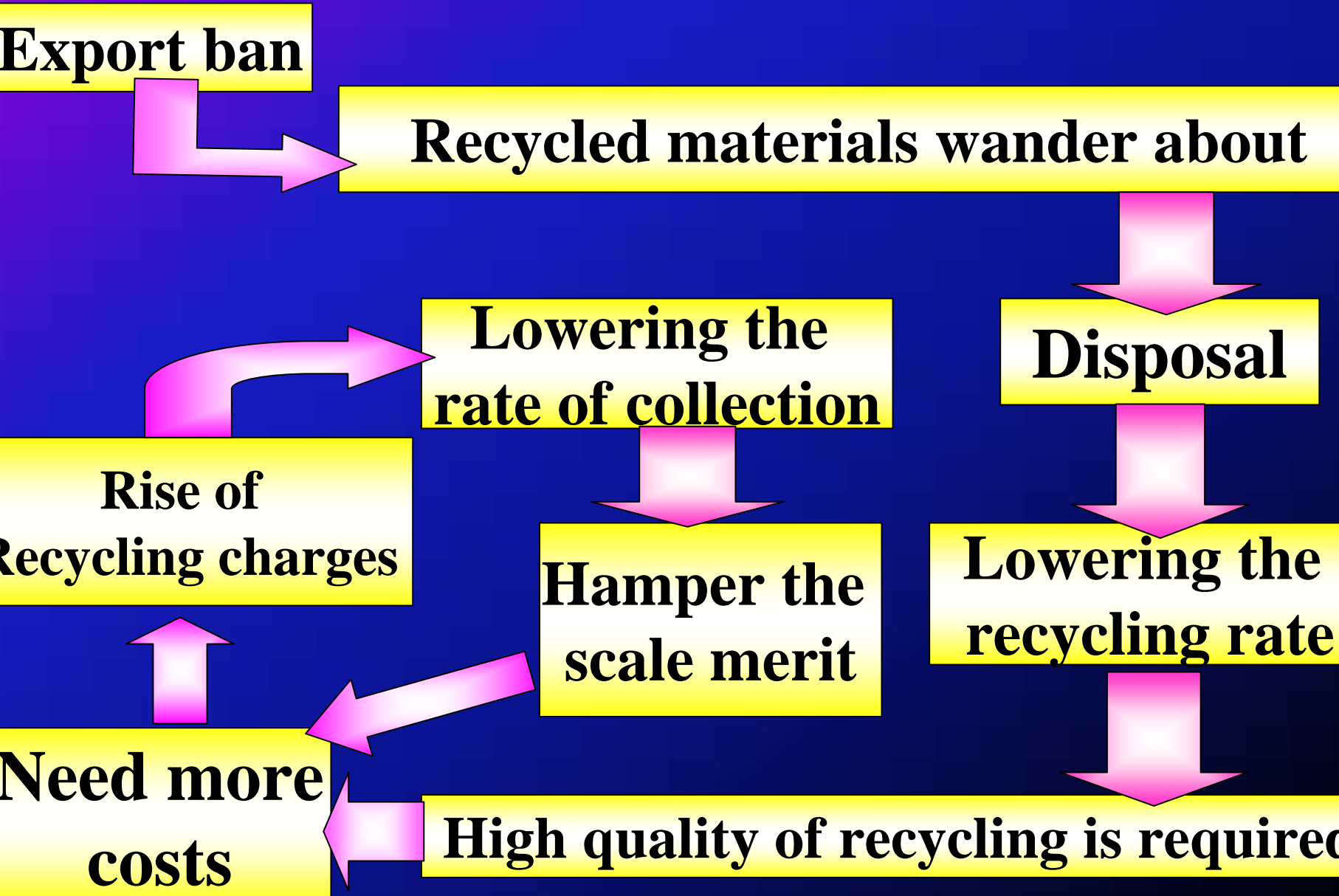
made in factories abroad more than 99 %

CRTs consist about 70% of television in weight

Little demand for CRTs in Japan

to recycle CRTs, smooth shift toward
producing countries are necessary

Negative spiral from the export ban



Negative effects in Importing countries

Import ban

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graph TD; A[Import ban] --> B[Decreased supply of secondary materials]; B --> C[Soaring the price of secondary materials];
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Decreased supply of secondary materials

Soaring the price of secondary materials

Shift for the virgin materials occurs

Negative consequences

Trade prohibition of recyclable materials

→ **Bad for** {
• Exporting countries
• Importing countries

How can we avoid
negative consequences?

**Asian
domestic market**

**Developed countries
Ex) Japan**

E-waste

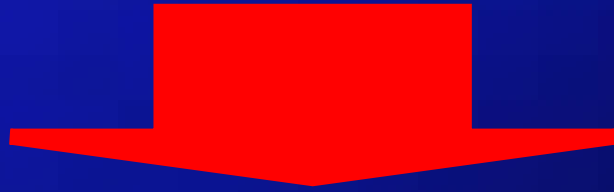
treatments in Asian countries

Bad impacts

***This Is the
Problem!***

**Before criticizing exports,
we first have to consider**

how to improve Bad treatments



Let us cooperate!

Thanx for listenin'



references

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