

E-waste Management and Recycling Mechanism in Japan



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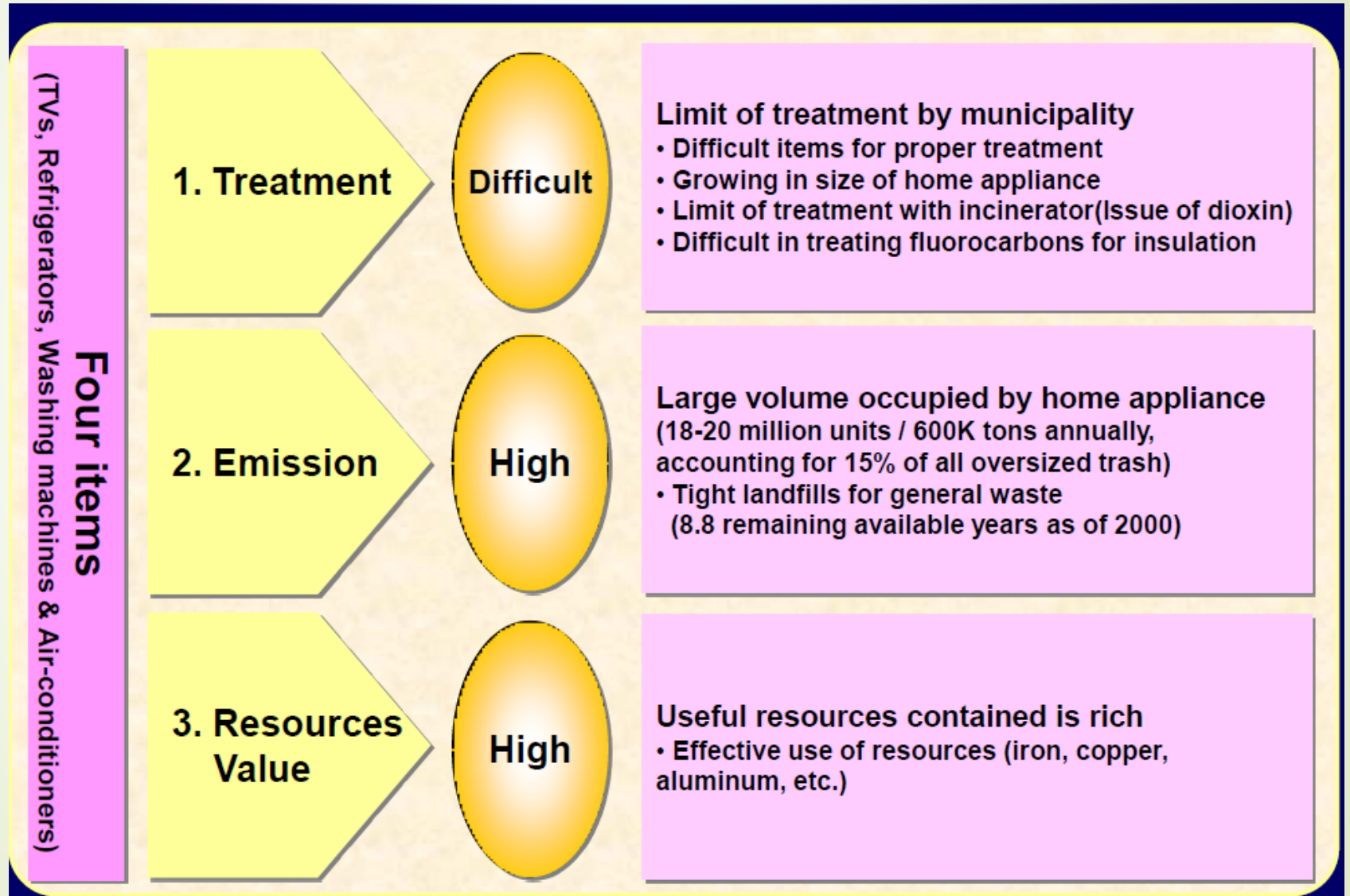
JICA technical Cooperation Project

Development of Mechanism for Household E-waste Management in Malaysia

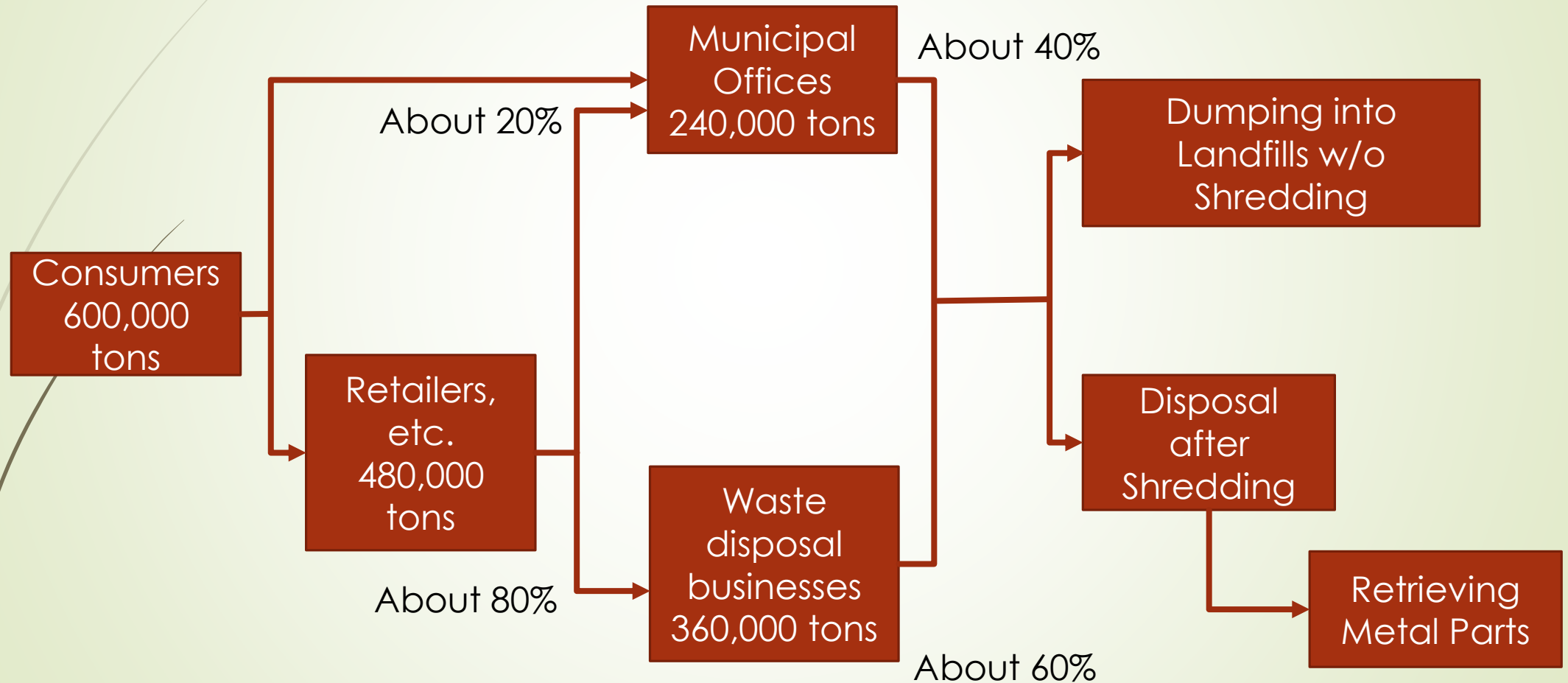
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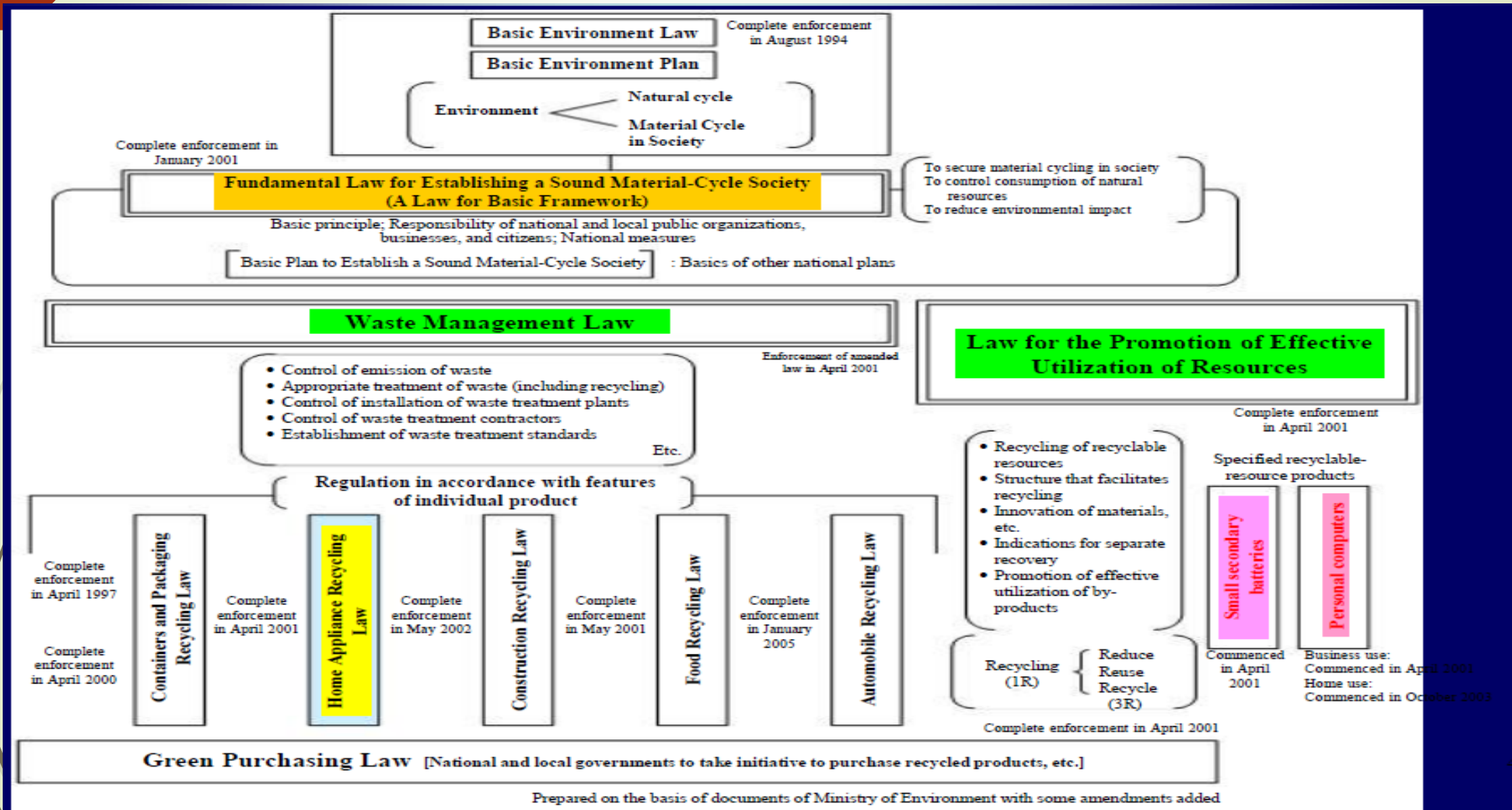
1. Background behind the Development of New E-waste Management Mechanism in Japan



Flow of E-waste (TVs, Refrigerators, Air Conditioners and Washing Machines) in 1998



2. Legal/Regulatory Mechanism to Control E-waste Management and Recycling



3. What is determined in the Japanese E-waste Management Law (Law for Recycling of Specified Kinds of Home Appliances 1998)

① Type of E-waste covered

- ▶ air conditioners,
- ▶ CRT TVs, LCD/plasma TVs
- ▶ refrigerators, freezers
- ▶ Washing/drying machines

□ Further detailed categorization is made for each of the above E-waste

3. What is determined in the Japanese E-waste Management Law (Law for Recycling of Specified Kinds of Home Appliances 1998)

② Roles and responsibilities of relevant stakeholders

- Manufactures are responsible for;
 - Taking back used home appliances, which manufactured or imported by themselves, from retailers
 - Recycling collected used appliances, by investing to establish recycling infrastructure
 - Publishing the costs for recycling the home appliances (recycling fees)



Retailers are responsible for;

- Taking back used home appliances, sold by themselves, from business consumers (B to B)
- Taking back used home appliances from consumers who buy new ones to replace old ones and obliged for proper deliver of the collected home appliances to licensed recycling plants
- Issuing home appliance recycling voucher to manufacturers and the designated body and sending copies to the consumers
- Displaying openly the costs for collecting and transporting



Consumers are responsible for:

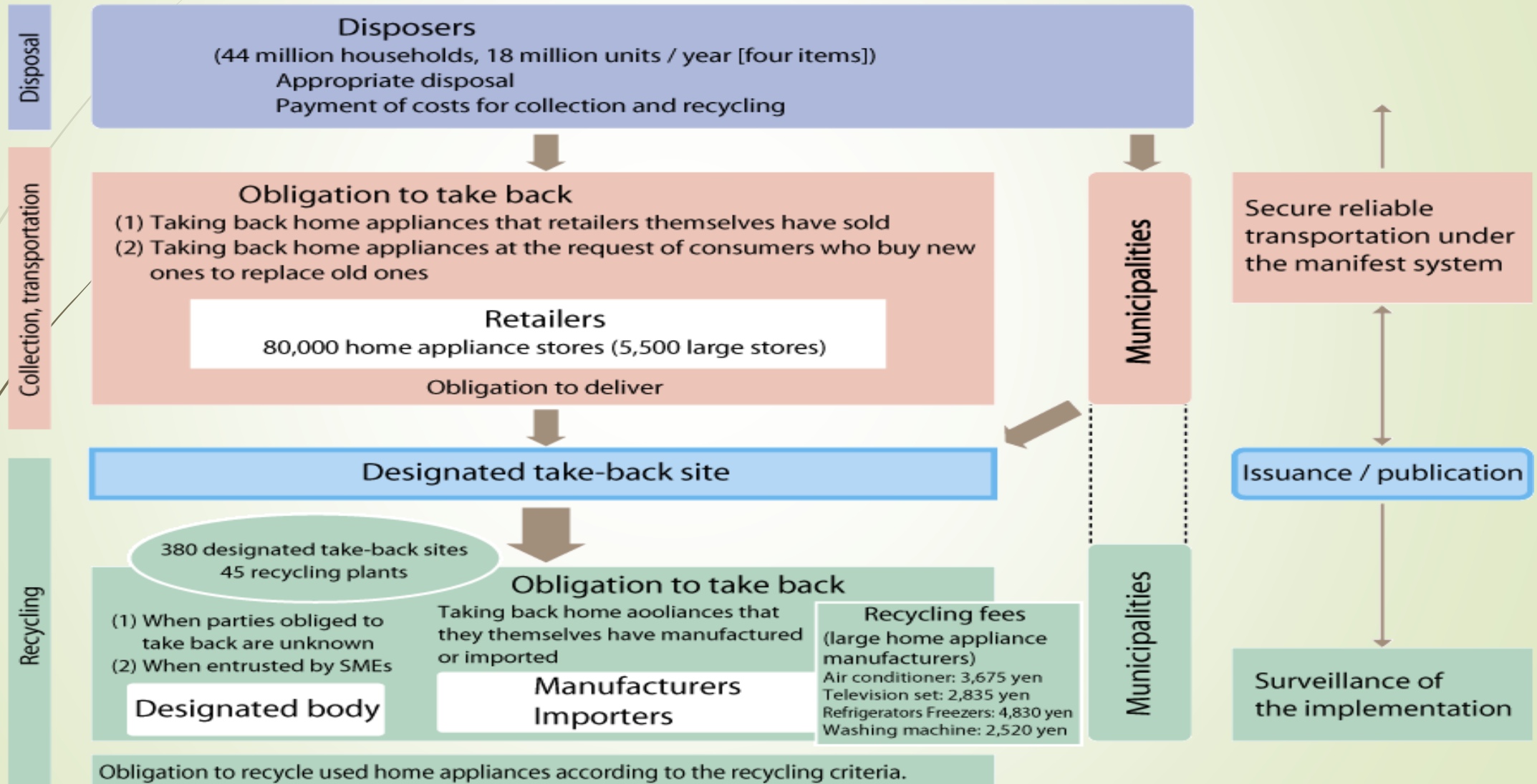
- Properly discharging used home appliances, namely not to discharge used home appliances to informal collectors.
- Bearing costs for collection and recycling of used home appliances.

Municipalities are responsible for:

- Delivering collected home appliances, which they have collected, to manufacturers and the designated body, as well as recycling them in some cases
- Collecting used appliances from consumers in some cases, especially rural area

Overall flow and responsibilities of stakeholders

Flow of Recycling of Used Home Appliances





⊗ Recycling infrastructure

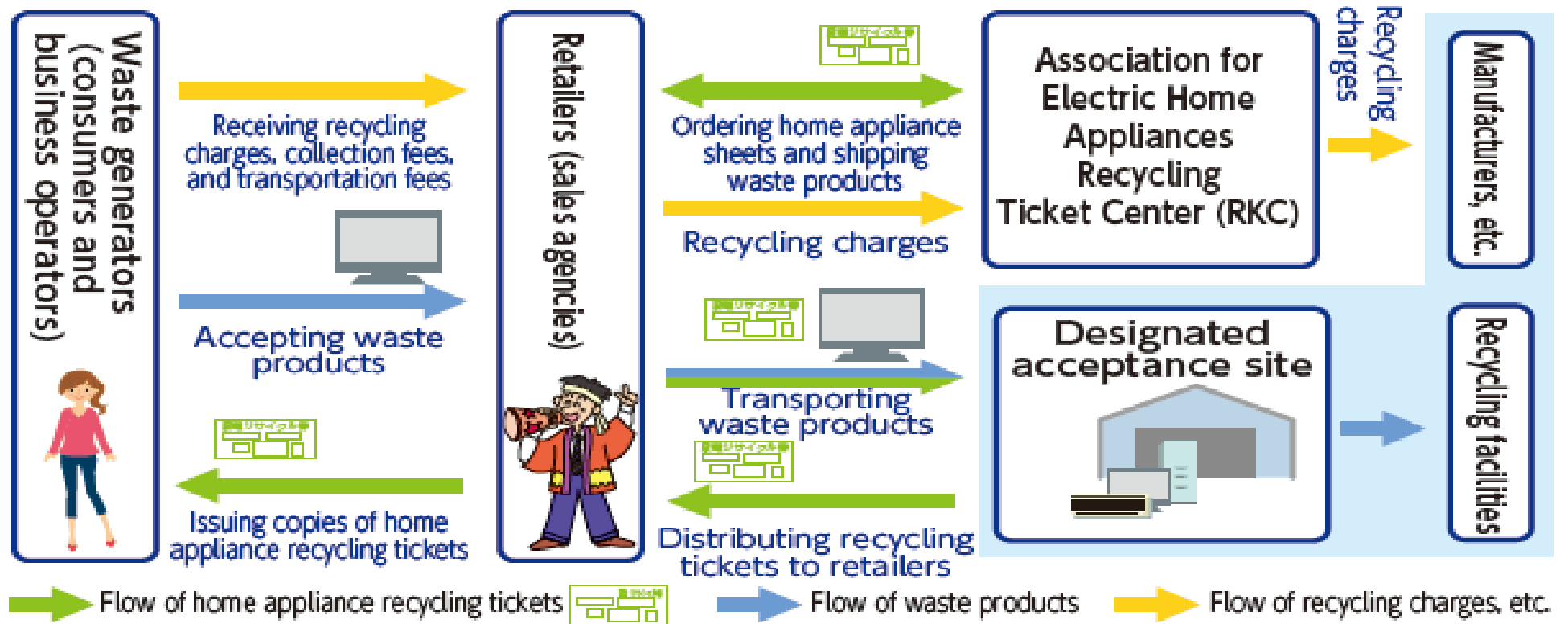


49 recycling facilities and 380 take-back sites nationwide. Recycling Facilities are built and operated by manufacturers under the law in cooperation with recyclers.

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E-waste, Fee, and Manifest

■ Flows of recycling costs and waste home appliances
(example: collection by retailers)



Source: Compiled from a diagram on the website of the Association for Electric Home Appliances

Who pays what cost and when are all clearly defined.

All moves of used home appliances accompanied by manifest (consignment note)

家電リサイクル券 (特定家庭用機器廃棄物管理票)

④ 排出者 控

Serial number 1109- 321-3

お問合せ管理票番号

a 1 1 0 9 1 2 0 1 4 3 2 1 3 a

● Name & address

排出者 (おなまえ) 様 (電話番号 090 -)

小売業者 (おなまえ) 様 (電話番号 043-)

住所 〒 263-0054 千葉県千葉市

Serial number 212900000489

● Product type and size

品目・料金区分	区分なし	小	大	備考
エアコン	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
テレビ	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	製造業者等による料金区分のある場合とない場合がある
ブラウン管式	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
液晶・プラズマ式	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
冷蔵庫・冷凍庫	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
洗濯機・衣類乾燥機	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

製造業者等名

製造業者等名	コード
<input type="checkbox"/> パナソニック (100)	<input type="checkbox"/> 東 芝 (110)
<input type="checkbox"/> 日立アプライアンス (300)	<input type="checkbox"/> シャープ (310)
<input checked="" type="checkbox"/> ソニー (340)	<input type="checkbox"/> 富士通ゼネラル (350)
<input type="checkbox"/> ダイキン工業 (120)	<input type="checkbox"/> 日本ビクター (130)
<input type="checkbox"/> 三菱電機 (320)	<input type="checkbox"/> 三洋電機 (330)
<input type="checkbox"/> ソニー(アイワ) (360)	<input type="checkbox"/> 三菱重工空調システム (370)

上記以外の場合は最終回収業者を
ご参照の上、該当する製造業者等
名を()内にご記入ください。

● Recycling and collection fee

回収・運搬料金 3,000 円

消費税 285 円

計 5,985 円

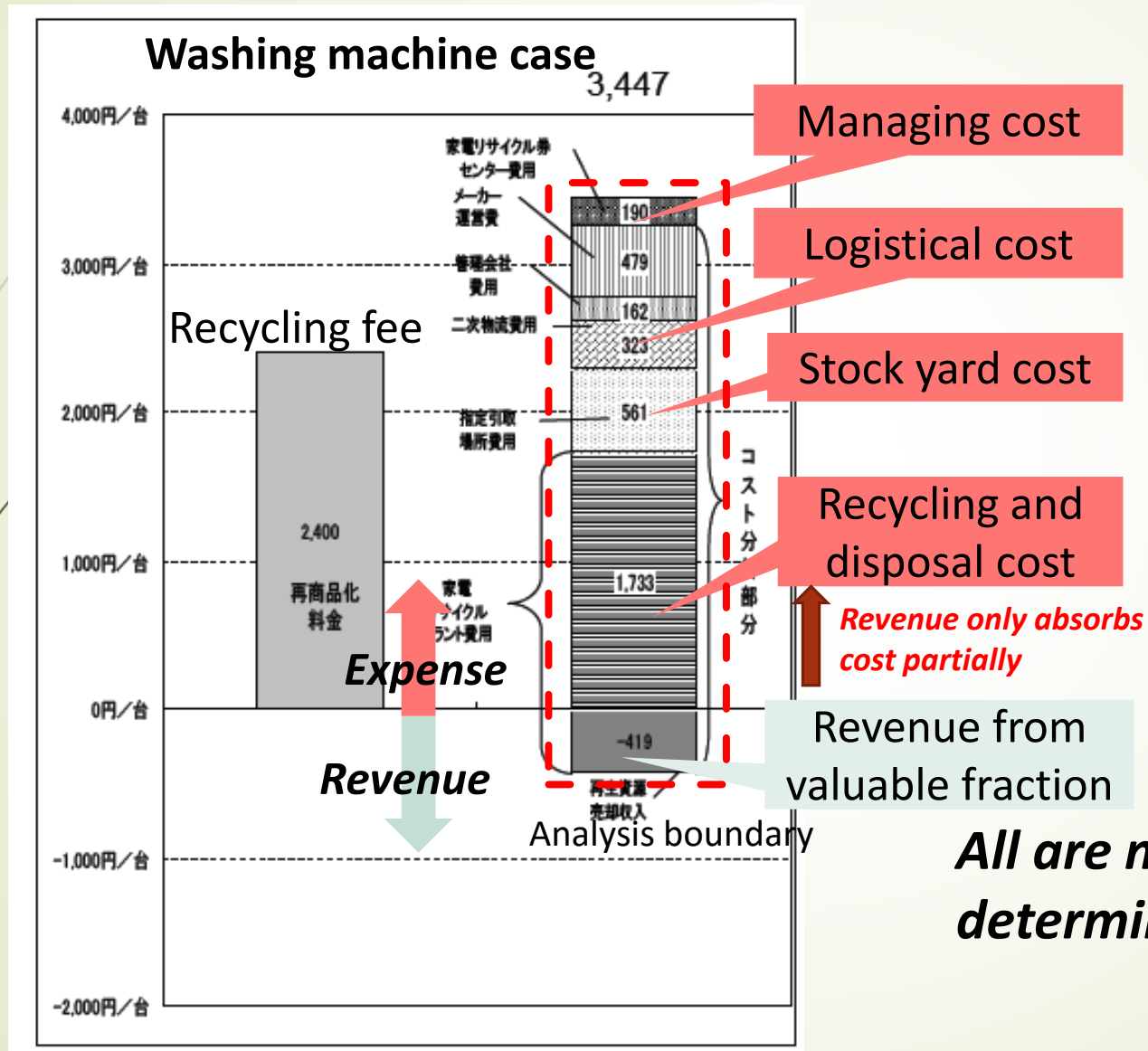
手数料 2,700 円

2,320 円

財団法人家電製品協会 家電リサイクル券センター

財団法人家電製品協会 2008

Determination of the recycling cost



Preconditions need to be set

- Recycling standard
- Requirement for waste treatment
- Expected collectable E-waste amount and recycling capability at FRF

All are necessary for determining the recycling cost

4. Lessons to be learned from the Japan's E-waste management system

- Clear and specific identification of what should be covered under the new system (What types of E-waste are really necessary to be controlled by laws and regulations. No excessive intervention to the current market mechanism.)
- Clear description of roles and responsibilities (obligations) of stakeholders (Who does what, who pays what, and so forth).
- Transparency and fairness of the system (Consensus building process is the key to address this.).
- Prevention of free-riders.
- Collection efficiency (One important key)
- Determining the recycling cost is the most difficult part in designing workable and feasible system.



➤ ***Thank you for your kind attention***