

# **Paper Recycling System in Japan**

**Tsunehiro Ogawa**

**President**

**Japan Paper Association**

# Challenges for Recovered Paper in ASEAN Countries

- Growing production of packaging papers along with economic growth.
- Increasing demand for recovered paper as raw material.

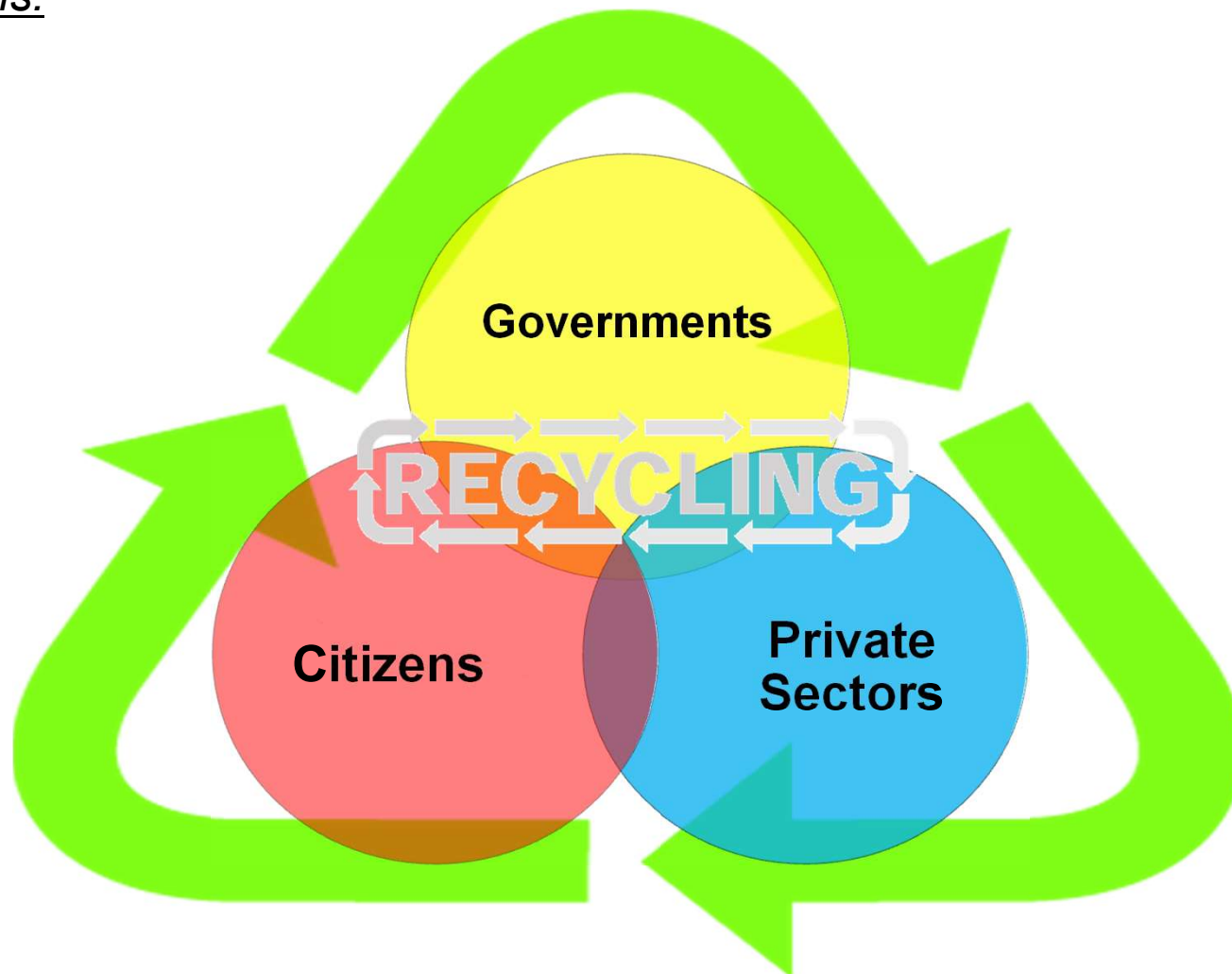
- Movement of tightening regulations on import of recyclable wastes.
- Uncertainty about future recovered paper supply from imports.



*Need for improving domestic recovered paper supply*

# What Needs a Successful Paper Recycling System?

Key to establish a successful paper recycling system is a close cooperation among private sectors (paper manufacturers and recovered paper distributors), governments and citizens.



# Government's Role in Paper Recycling

## ~Development of Legal System~

### Legal Structure on Waste Disposal & Recycling in Japan

#### Basic Law for Promotion of the Creation of a Recycle-Oriented Society (Basic framework law)

- Basic principles
- Responsibilities of National/local governments, businesses, and citizens
- National measures

#### <Appropriate Disposal of Waste>

Waste Disposal and Public Cleansing Act

#### <Promotion of 3R>

Act on the Promotion of Effective Utilization of Resources

Regulations corresponding to characteristics of individual products

Containers and Packaging Recycling Law

Home Appliances Recycling Law

Construction Materials Recycling Law

Food Recycling Law

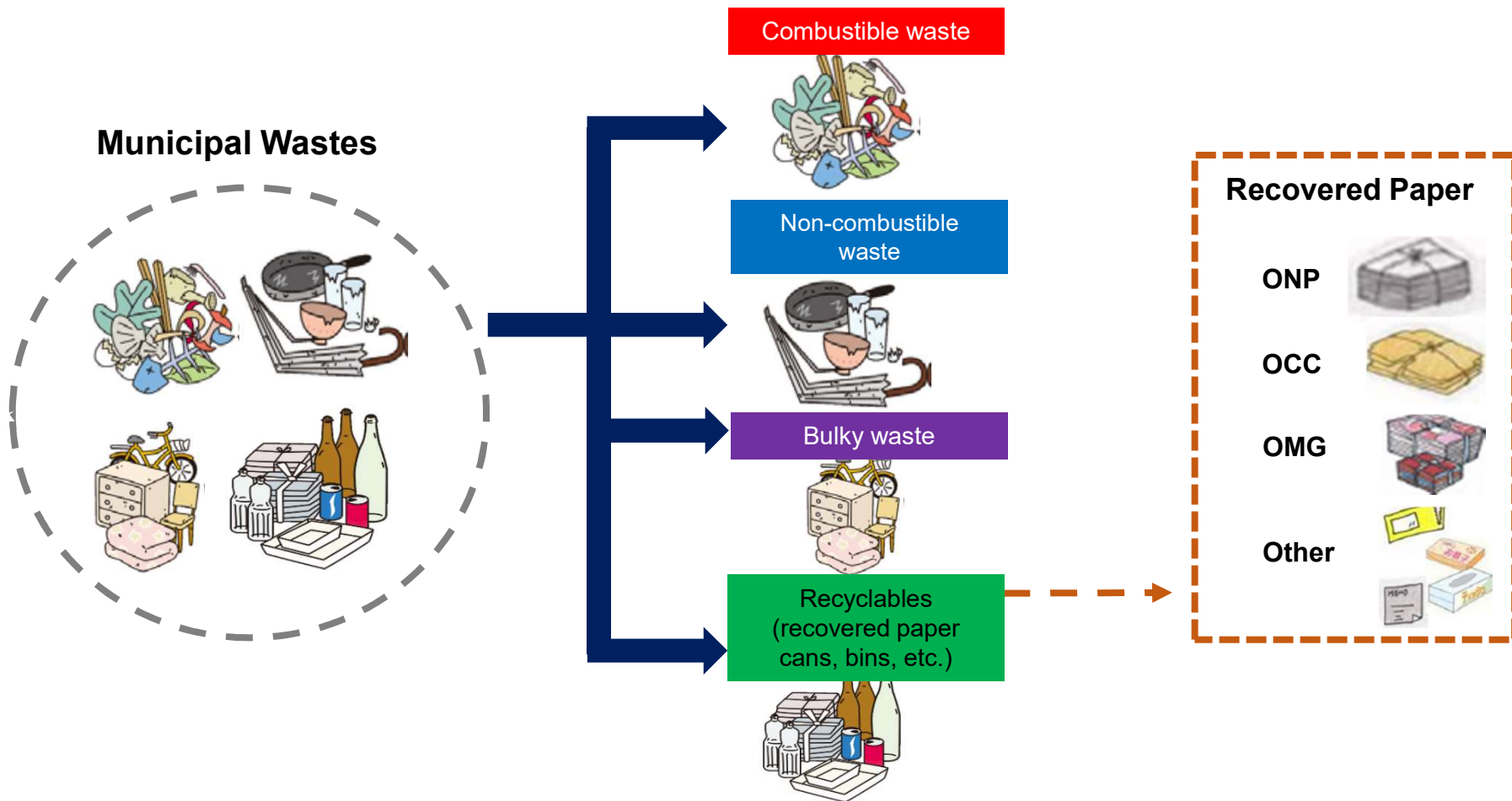
End-of-Life Vehicle Recycling Law

Small Home Appliances Recycling Law

# Government's Role in Paper Recycling

## ~Sorted Collection of Wastes~

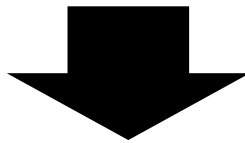
- Local governments classify municipal wastes into several categories and collect them in a separate manner.
- Furthermore, used paper is collected in categories (OCC, ONP, OMG, and etc.)



# Roles of Paper industry in Paper Recycling

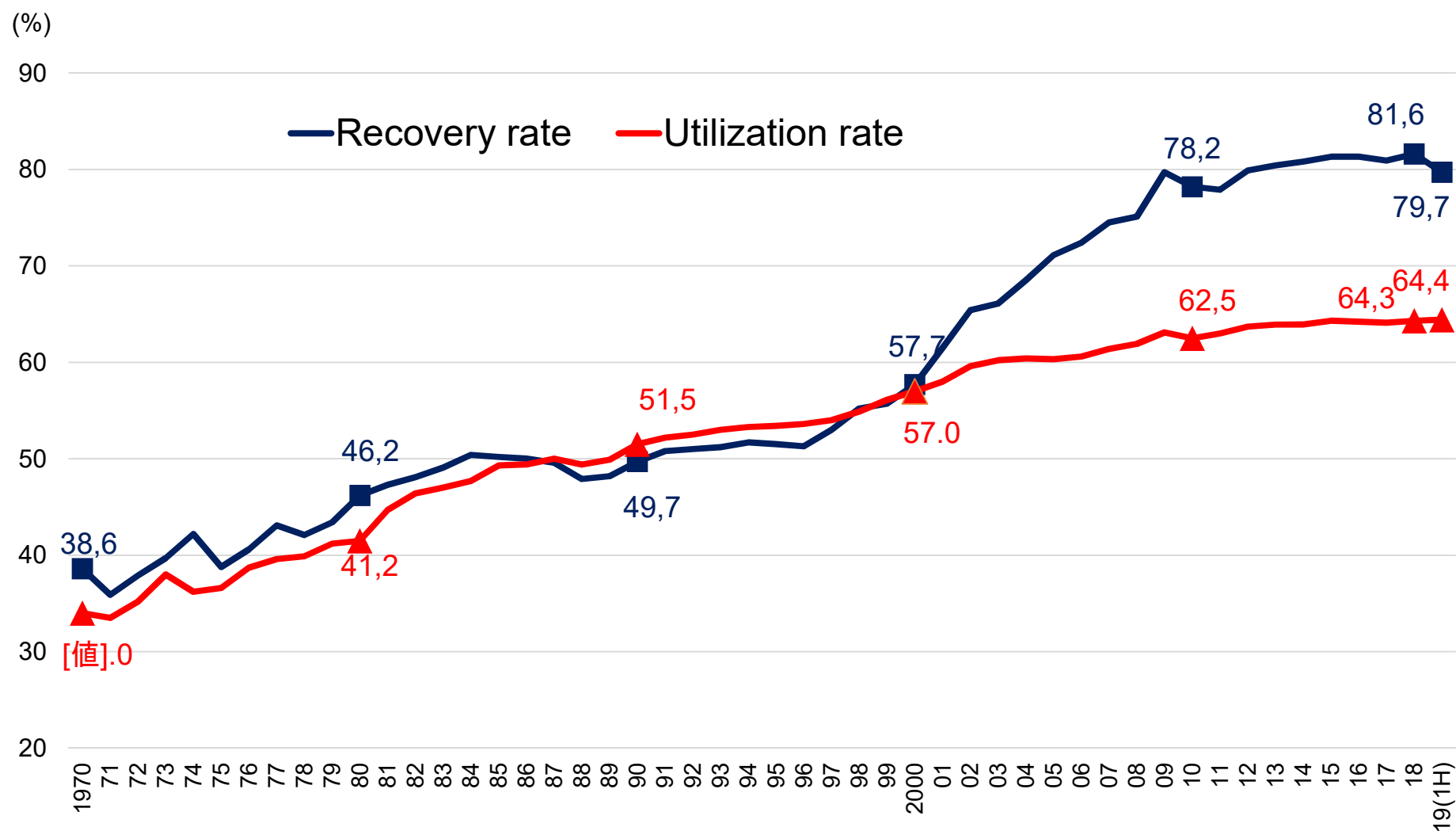
## ~Setting Industry's Recovered Paper Utilization Target~

- In the late 1980s, increased paper waste generation became a social problem in Japan.
- Japan Paper Association (JPA) established the “Recycling 55 Program” in 1990, with a target of increasing recovered paper utilization rate to 55% by 1995.
- Since then, JPA has revised the target every five years, and the latest target set in 2015 is “by 2020, achieve the utilization rate of 65%”.



- To achieve the target, the industry has been working continuously on improving recovered paper process technologies with machine suppliers, as well as developing recycled paper products.

# Recovered Paper Recovery and Utilization Rate in Japan



Source: Ministry of Economy, Trade and Industry, Ministry of Finance

# Quality Standard of Recovered Paper

In Japan, Paper Recycling Promotion Center (PRPC) sets the quality standard for major 5 recovered paper grades.

Grade	Prohibitive materials		Mix ratio of other recovered paper grades	Moisture content
	Classification A	Classification B		
ONP	None permitted	May not exceed 0.3% (None permitted in principle)	May not exceed 1%	May not exceed 12%
OCC	None permitted	May not exceed 0.3% (None permitted in principle)	May not exceed 3%	May not exceed 12%
OMG	None permitted	May not exceed 0.5% (None permitted in principle)	May not exceed 5%	May not exceed 12%
Sorted residential old paper & paperboard	None permitted	May not exceed 0.5% (None permitted in principle)		May not exceed 12%
SOP	None permitted	May not exceed 0.5% (None permitted in principle)		May not exceed 12%

(Prohibited materials)

1. Classification A is defined as any materials that may significantly damage to paper products or paper making process, and includes stones, metal, cloth, sublimation transfer paper, nonwoven fabric, perfumed paper and synthetic paper.
2. Classification B is defined as any materials that are not preferable to be mixed into raw material for papermaking, and includes carbon paper, carbonless copy paper, laminated paper, adhesive tape and thermal paper.



# Quality Improvement Efforts in Recovered Paper Wholesalers

~Accreditation system for recovered paper quality (J-Brand) by Japan Recovered Paper Association (JRPA)~

## (1) Purpose:


Improve recovered paper quality and promote paper recycling through unification of quality specification of recovered paper in Japan

## (2) Quality specification

In line with PRPC's "Quality Standard of Recovered Paper"

## (3) Accreditation grades

OCC, ONP

 <b>J-Brand</b>	
品名	段ボール・新聞
会社名	
出荷事業所名	
事業所ナンバー	
メーカー指定項目	
出荷日	

全国製紙原料商工組合連合会

本表示は品質保証制度ではないので損害賠償義務は有しません

# Conclusion – Key Factors for Paper Recycling

1. Cooperation among government, private sectors (paper manufacturers, recovered paper distributors) and citizens, and their cooperation.
2. Development of legal system by central government.
3. Sorted collection of wastes by local governments.
4. Cooperation for sorted collection by households.
5. Industry-common grade classification and quality standard.
6. Quality management and stable supply by recovered paper wholesalers.
7. Efforts for promoting recovered paper utilization in the paper industry as a whole.

Thank you