# AUTOMOBILE RECYCLING SYSTEM

May 21<sup>st</sup>, 2024



#### **Contents**

- 1. Background of the Automobile Recycling System
- 2. Current Status of the Automobile Recycling System

\*JARC Profile



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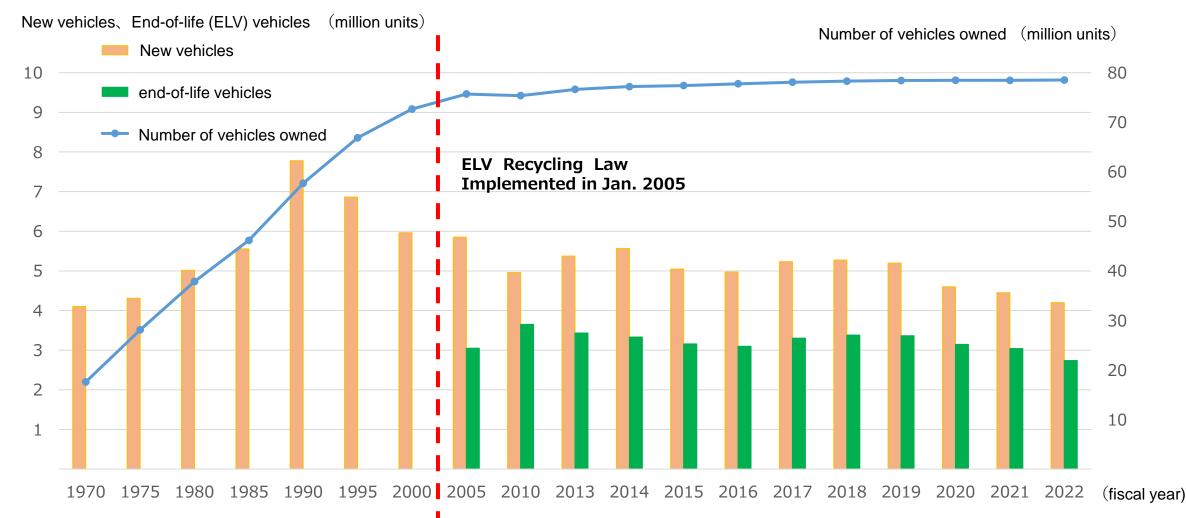
#### Vehicle distribution situation data



Approximately 5 million new vehicles are sold in Japan every year.

Approximately 3 million vehicles are retired in Japan each year. (since 2005)

Currently, the number of vehicles owned in Japan exceeds 78 million.



**Japan Automobile Recycling Promotion Center / JARC** 

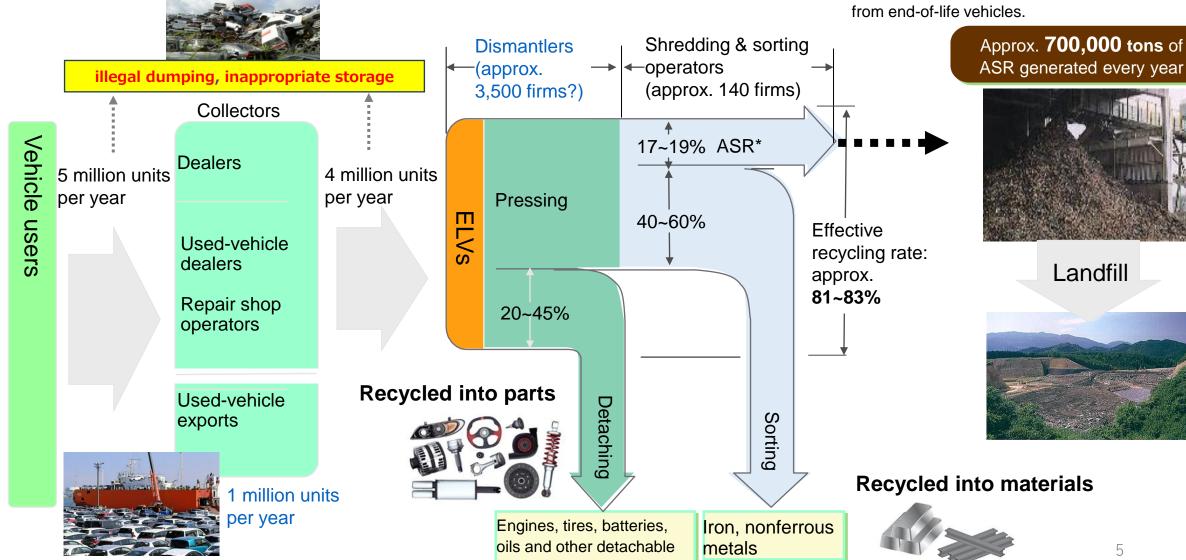
# **ELV Flow before ELV Recycling Law Legislation**



Many businesses were involved in recycling end-of-life vehicles. At that time, the recycling rate was around 80%.

#### \* A S R : Automobile Shredder Residue

Crushed debris such as resin, rubber and glass that remains after metals and more are collected from end-of-life vehicles.

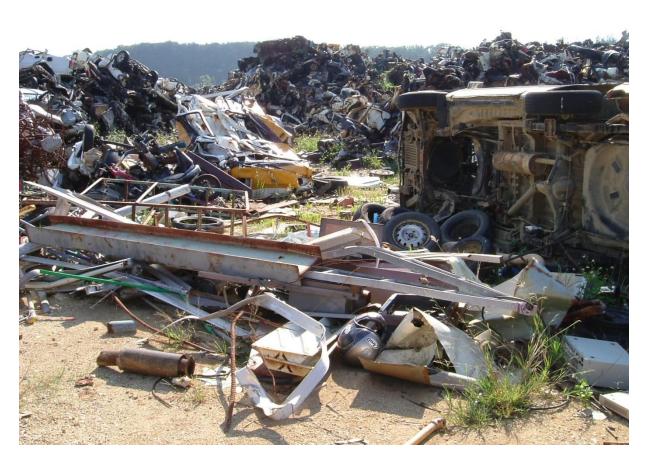


parts



Such cases were occurring all over Japan.

1990s







Such cases were occurring all over Japan.

#### 1990s

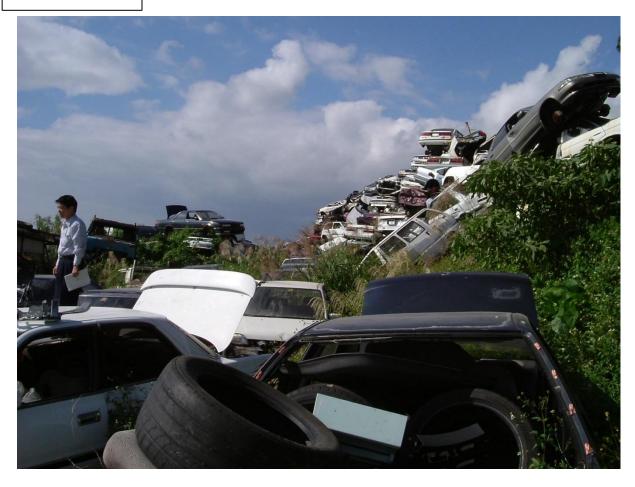






Such cases were occurring all over Japan.

#### 1990s







# Illegal dumping and inappropriate disposal

As of the end of September 2004

Total	Illegally dumped ELVs	Improperly piled ELVs
218,359 units	22,499 units	195,860 units

Source: Government council



# Symbolic case: Case of Teshima Island

Illegal dumping case of industrial wastes happened tragically at Teshima Island on this beautiful Seto Inland Sea symbolizing Japan's typical economy-first, others-second, society.

This case, eventually, lead society to focus on the wastes problem and led Japan to create an

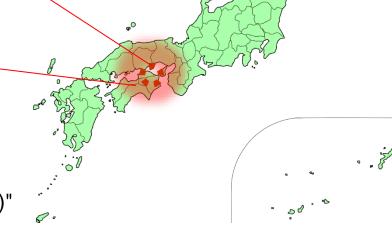
environment-friendly recycling-oriented society.



Kagawa Pref., Japan

- ➤ Uncovering of illegal ASR dumping on Teshima Island, 1990
- > Approx. 900,000 tons of ASR dumping on Teshima Island
- Approximately 52 billion yen is expected to be spent over 10 years to clear away the industrial waste

Source: "Ministry of the Environment Press Release Presentation (January 25, 2013)"



# Close-up of the problem



# Why did such inappropriate cases occur?

- 1. Economic reasons: "I don't want to pay for garbage disposal!"
- 2. Lack of understanding of the environment



As a result of discussions with various stakeholders, including vehicle owners, stakeholder businesses and automakers, it was decided to create a new recycling system to handle this problem.

- Institutionalization of cost burden
- ✓ Mandate proper processing
- Promoting understanding of proper waste disposal

# New recycling system "Act on Recycling, etc. of End-of-Life Vehicles"

July 12, 2002 : Enacted

January 1, 2005: Came into force



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# Features of the new automobile recycling system



# **Features**

# 1. Vehicle owners pay recycling fees

In principle, you pay recycling fee when you purchase a vehicle.

The recycling fee will be used for the proper disposal of three items from end-of-life vehicles.

(3 items: shredder residue, chlorofluorocarbon gas, airbag)

# 2. Introduction of Electronic Manifest System

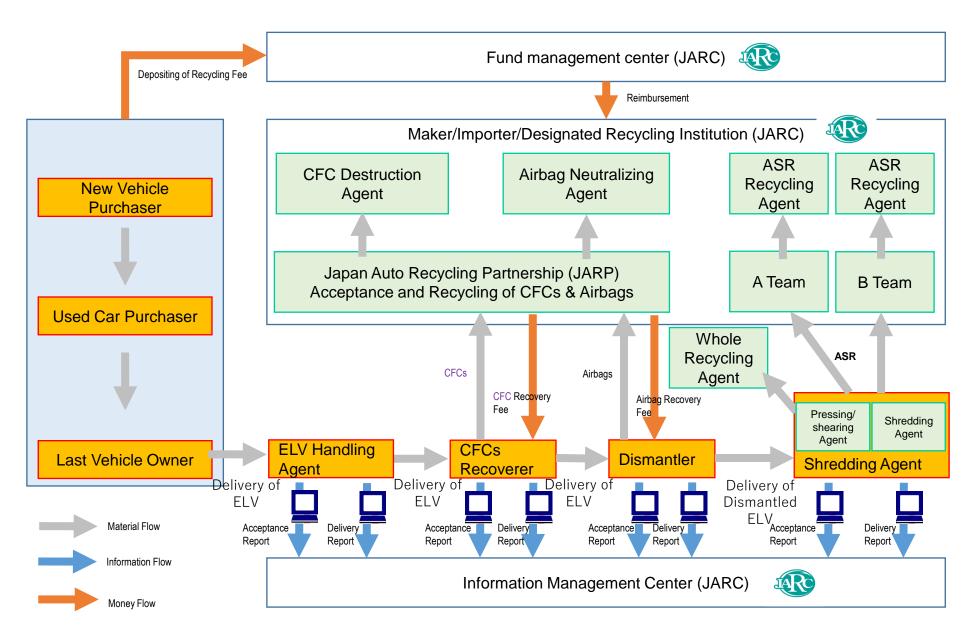
Introduced a system to manage the process of properly handling the three items.

# 3. Introduction of penalties for violations and registration/permit system for recycling businesses

Introduced mechanisms such as penalties for violation of obligations and cancellation of registration/permits.

# Main scheme of the Automobile Recycling System





# Roles under the Current Automobile Recycling System

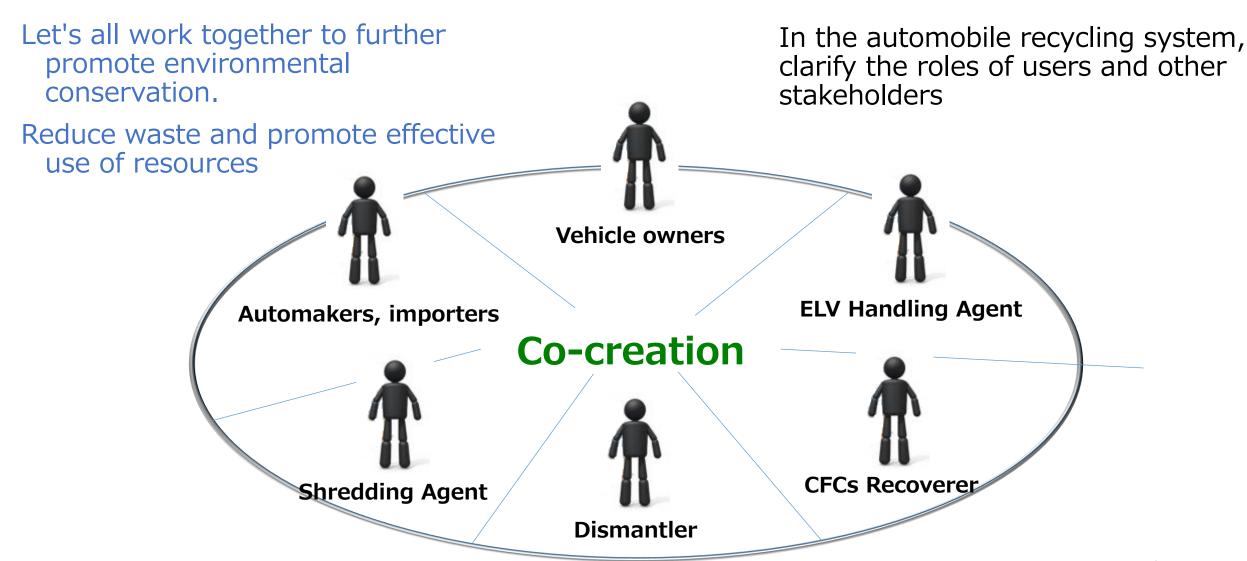


Vehicle owners	Depositing of recycling fee; handing ELV over to a collector	
Stakeholder businesses	Proper collection & delivery of ELVs; recovery of fluorocarbons, airbags and other waste.	
(dealers, repair shops, dismantlers, shredding operators)	Dismantlers required to properly dispose of batteries, waste oils/fluids and phosphorescent lamps	
Automakers, importers	(1) Automakers and auto importers must collect, recycle and properly dispose of ASR, fluorocarbons and airbags recovered from the vehicles they manufactured or imported	
	*ASR recycling rate targets: 30% in 2005 (88% in ELV equivalent) 50% in 2010 (92% in ELV equivalent) 70% in 2015 (95% in ELV equivalent)	
	(2) Required to assume the central role in structuring and running the new recycling system	

## Roles under the Current Automobile Recycling System



#### Relationship diagram



# **Current status of ELV recycling?**

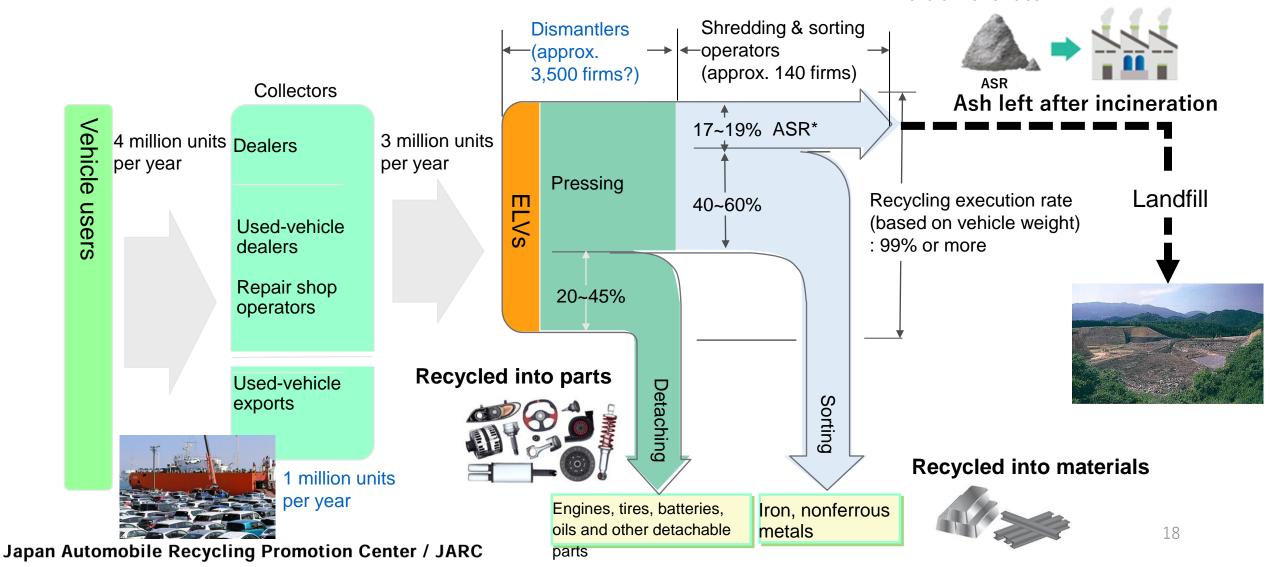


Most ELV portions recycled.

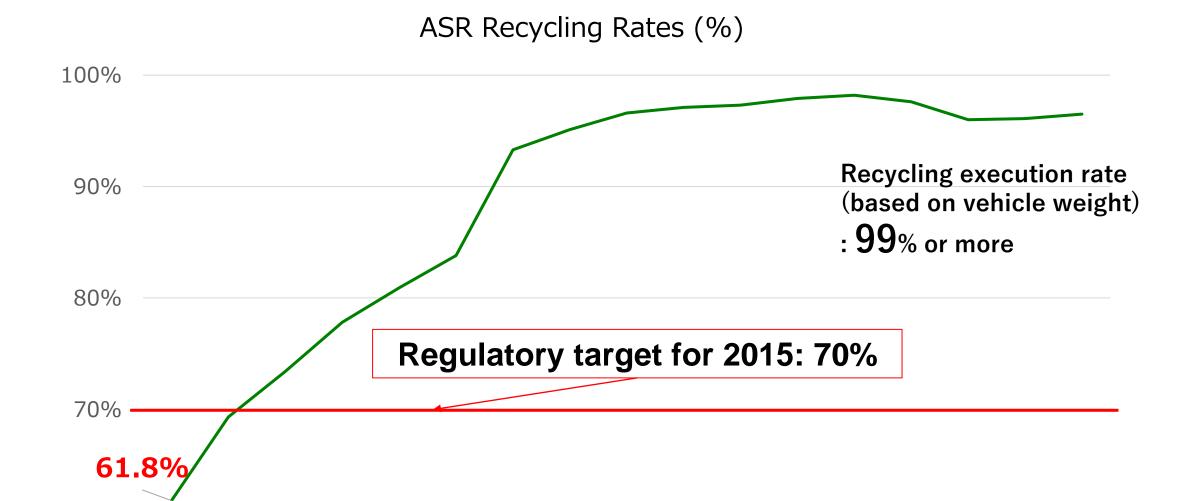
Recycling execution rate (based on vehicle weight): 99% or more

#### \* A S R: Automobile Shredder Residue

Crushed debris such as resin, rubber, glass that remains after metals and more are collected from end-of-life vehicles.







2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Source: Government council

60%

# Illegal dumping and inappropriate disposal



Since the start of the automobile recycling system, the number of illegally dumped or piled ELVs has dropped phenomenally.

		End of Sep. 2004	End of Mar. 2021
To	tal	218,359 units	5,281 units
	Illegally dumped ELVs	22,499 units	752 units
	Improperly piled ELVs	195,860 units	4,529 units

Source: Government council



# **Thank You for Your Attention!**





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# **JARC Profile**



Registered Name	Japan Automobile Recycling Promotion Center (JARC)	
Address	11F,Jidosha Kaikan,1-30 Shiba Daimon 1-chome,Minato-ku,Tokyo 105-0012,Japan  URL <a href="https://www.jarc.or.jp/">https://www.jarc.or.jp/</a>	
Founded	November 22, 2000 April 1, 2010 : Reregistered as a public interest incorporated foundation	
President	Eiji Hosoda	
Objectives	Conduct activities for promoting the recycling and proper disposal of end of life vehicles with a view to conserving natural resources, protecting the environment, benefiting the vehicle users, developing the economy, and advancing the people's living standard.	
Supporting Members	<ul> <li>Japan Automobile Manufacturers Association</li> <li>Japan Mini-Vehicles Association</li> <li>Japan Auto Parts Industries Association</li> <li>Japan Used Car Dealers Association</li> <li>Japan Automobile Importers Association</li> <li>Japan Automobile Service Promotion Association</li> <li>Japan Automobile Dealers Association</li> <li>Japan Iron and Steel Recycling Institute</li> </ul>	
Jurisdictive Offices for the entities designated in the Automobile Recycling Law	<ul> <li>Ministry of Economy, Trade and Industry;</li> <li>Ministry of the Environment</li> </ul>	



Eiji Hosoda President