

Pursuing value beyond usage ...

The Online- Recyclable Resources Market in Korea



<http://www.re.or.kr>



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1-1. What Is the Recyclable Resources Market?



Definition

The Recyclable Resources Market is a reliable, customized online marketplace operated by the Korean government to help citizens continue to use precious resources instead of using them once and disposing of them

Mode of Operation



Profit -Generation for Sellers & **Cost-Reduction** for Buyers

1-2. Overview



Establishment & Operation

- Establishment by Ministry of Environment in 2012
- Korea Environment Corporation commissioned operation

Trading Items

- Waste Materials, intermediate artifacts
- Recycled Products, Used Products ...

Users

- 119,266 business sites generating, transporting, Disposing of waste and the general public ...

Services

- Optimized Matching system with GIS, Electronic Bid, Commission Trading, Donation, relevant Information...

The screenshot displays the '순환자원거래소' (Circular Resource Exchange) website. At the top, there's a navigation bar with categories like '순환자원', '중고제품', '오염방지', '폐기물', '나눔기부', and '입찰거래'. The main content area features a grid of trading items, each with a thumbnail, title, price, and category. For example, '폐기물거래 우수사례 공모' (Waste Material Trading Excellent Case Competition) is highlighted. Below the grid, there's a table titled '입찰정보' (Auction Information) with columns for '구분' (Category), '종교번호' (Item No.), '종교명' (Item Name), '종교자' (Item Source), '입찰사자일' (Auction Date), '입찰마감일' (Auction End Date), '개찰일' (Opening Date), and '상태' (Status).

구분	종교번호	종교명	종교자	입찰사자일	입찰마감일	개찰일	상태
중고제품 (폐기물거래)	20150611001	담양공공처리시설(폐기물)처리시설 폐기물 공판품	한국환경공단	2015-06-11 (08:00)	2015-06-18 (08:00)	입찰중	(표준)
오염방지 (폐기물거래)	20150604001	서산타액화장품 폐기물처리	(주)태양	2015-06-05	2015-06-23 (08:00)	2015-06-21	입찰중 (표준)
폐기물 (폐기물거래)	20150605001	서산타액화장품 폐기물처리 시설 폐기물	(주)태양	2015-06-06	2015-06-21 (08:00)	2015-06-24	입찰중 (표준)
폐기물 (폐기물거래)	20150605002	서산타액화장품 폐기물처리 시설 폐기물	(주)태양	2015-06-06	2015-06-21 (08:00)	2015-06-24	입찰중 (표준)

At the bottom, there's a section for '오른마켓' (Right Market) with icons for '다문화 이해의 시장', '인기제품', '협동조합', '사회적 기업', '기부품', and '공공기관'.

1-3. The Blind Spot of Recycling



The Uncomfortable Truth :

*The destiny of the same waste differs depending on where it is generated
(Recycling vs. Incineration/Landfill)*

Medium-to-Large Business Sites



- ✓ Concentrated, large quantities
- ✓ Systematic separated generation
- ✓ Recycling partners secured

Efficient Recycling

VS

Small Business Sites

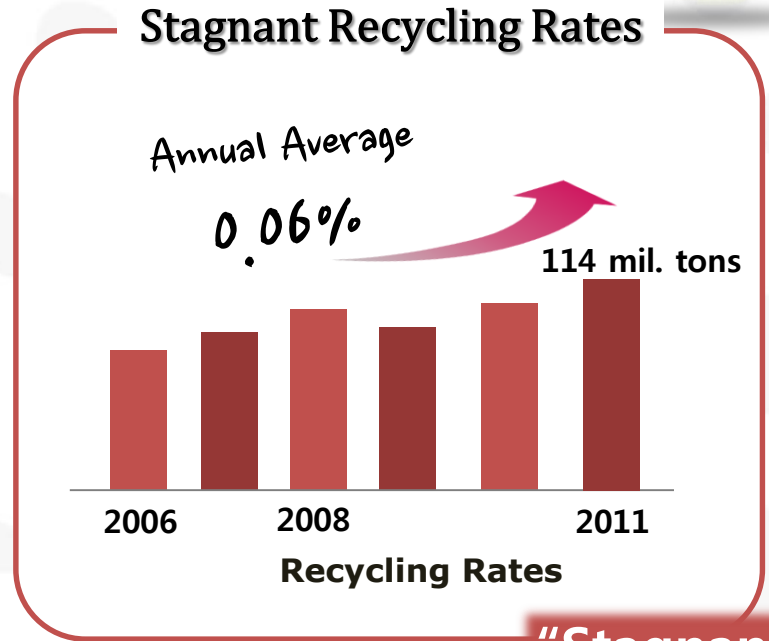
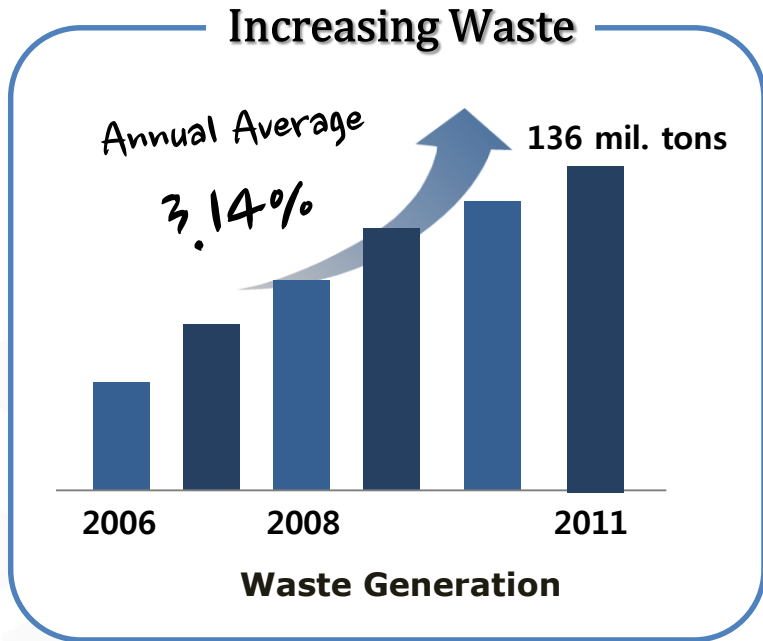


- ✓ Sporadic, small quantities
- ✓ Mixed generation
- ✓ High-cost collection/disposal

Blind Spot of Recycling

**Imbalance in recycling conditions intensifies due to differences
in scales of business sites and information accessibility**

1-4. Necessity for the Recyclable Resources Market



"Stagnant"

Driving force for recycling policy is required

Time for Presenting a **New Policy Framework** for invigoration of recycling

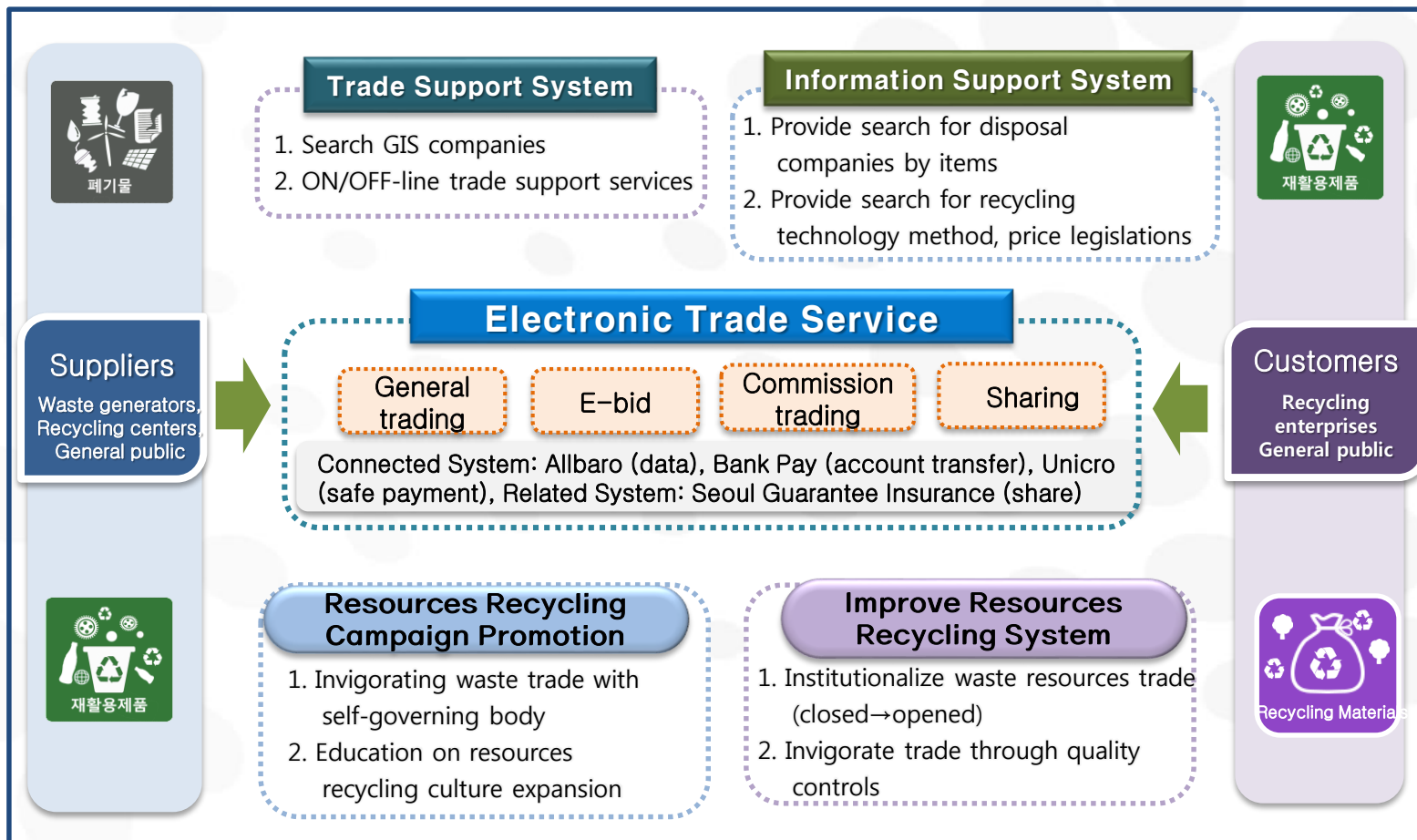


Need the Recyclable resources Market

1-5. The Operation Flowchart



The Operation Flowchart of Recyclable Resources Market





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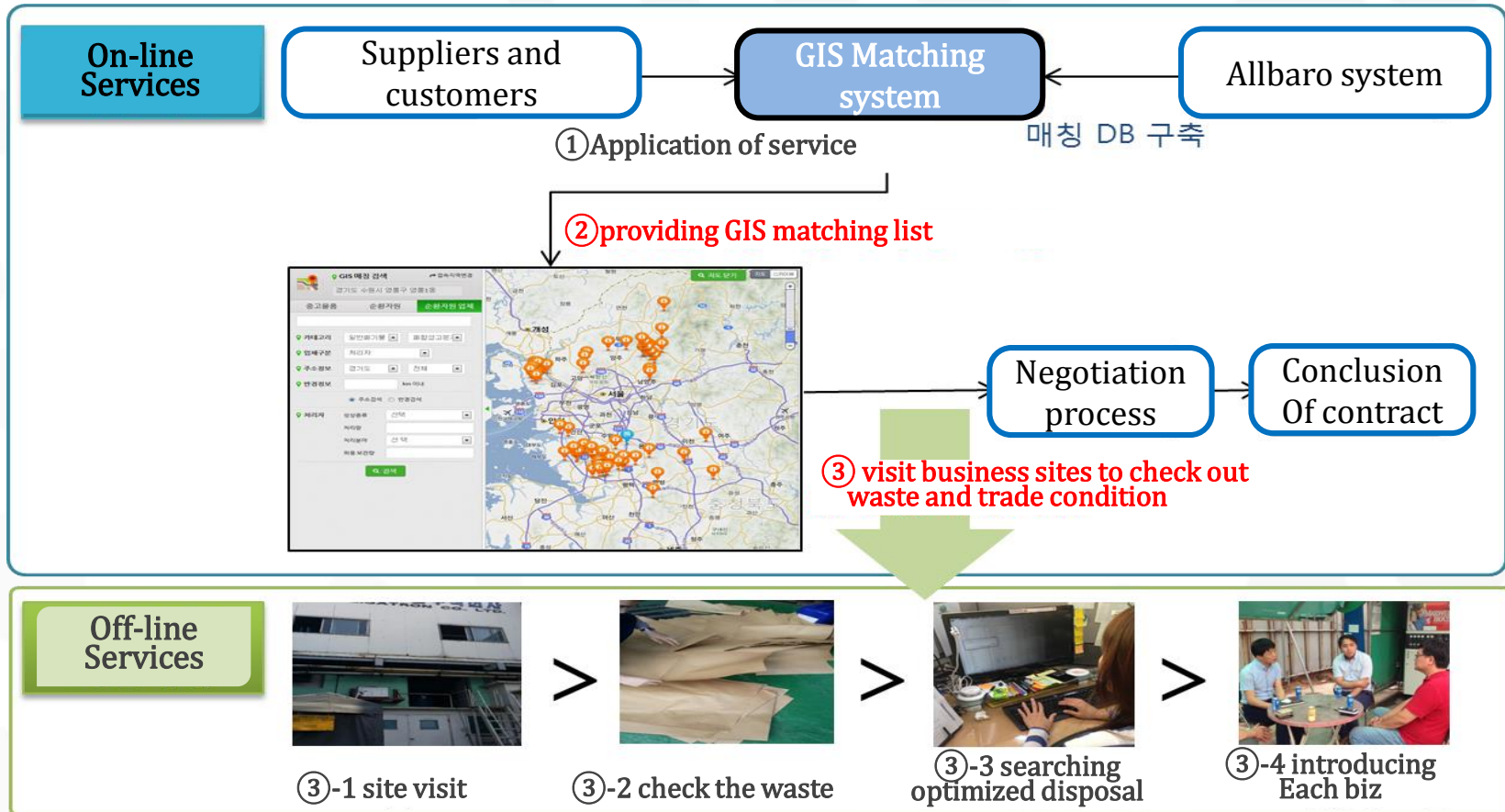
1. Overview of the Recyclable Resources Market
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2-1. Optimized waste business Matching service



♻️ Matching trading demand optimized companies for an company hard to find proper waste Disposal or recycling companies because of lacking of information to raises the circulation Rate of recyclable resources.

Services process



* GIS Searching System



1. Searching condition
(category, price, area etc.)

GIS 매칭 검색 ↔ 검색지역변경

경기도 수원시 영통구 영통1동

중고물품 순환자원 **순환자원 업체**

카테고리 일반폐기물 폐합성고분자

업체구분 처리자

주소정보 전체 전체

반경정보 km 이내

주소검색 반경검색

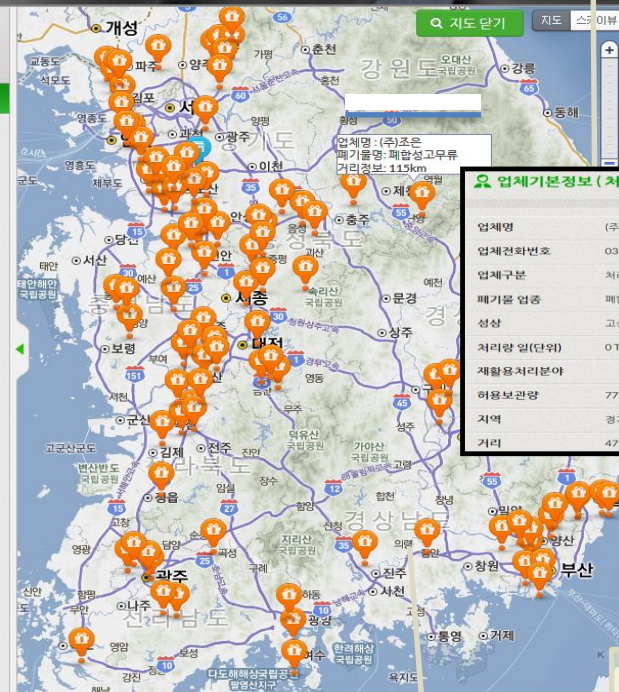
처리자 성상종류 선택

처리량

처리분야 선택

허용보관량

검색



요 업체기본정보 (처리자)

업체명	(주)한국자원환경(수원)
업체전화번호	031-224-0079
업체구분	처리자
폐기물업종	폐합성고분자회합물
성상	고상
처리량 일(단위)	0 Ton
재활용처리분야	
허용보관량	771.7 Ton
지역	경기도
거리	47.5km

3. Detail info
(category, situation, telephone number, area, capacity etc.)

2. Products, and company that you search

Searching waste generation, treatment company, recycled products, and used products in Korea by Geographic Information System

2-2. Electronic bidding Service



Customers may submit requests and select bidders through an electronic system with electronic signatures of encoding systems without carrying trading and bidding documents in person.



▪ Range of users

- Opens the system in steps for everyone who wants to use the system autonomously
- Allow the bidders to make free decisions in the bidding processes

▪ Range of bid objects : present → Wastes

- Expected to expand the range on waste and useless items disposal services of national, community and public organization levels in the future

2-3. Commission Trading Service



Customers may submit requests of trade and service commissions with electronic signatures or encoding systems and select trade partners after the settlements



▪ Range of users

- Autonomous use for the Recyclable Resources members, free of charge for all additional fees, including deposits
- Not a requirement since the selection of businesses are according to commission trading

▪ How to use

- Fill the form(Notification period, commission types, regional restriction, etc)
- One to one settlement of the cost according to the commission
- Provide SMS services according to the settlement and commission results

2-4. Customized Information Service



Provide Recycle Information on Earth Item

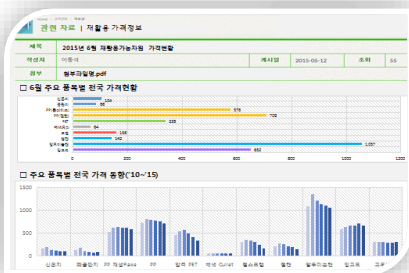
- **Waste disposal business Information and online trade support**
 - Select waste types in a recycled material category to list waste disposal businesses

종류	폐기물 종류	처리방법	처리업체	처리비용	처리기간	처리장소
가정쓰레기	가정쓰레기	매립	한국환경자원공사	100원/톤	1~2주	가정쓰레기처리장
사무실쓰레기	사무실쓰레기	매립	한국환경자원공사	100원/톤	1~2주	사무실쓰레기처리장
제조업쓰레기	제조업쓰레기	매립	한국환경자원공사	100원/톤	1~2주	제조업쓰레기처리장
건설쓰레기	건설쓰레기	매립	한국환경자원공사	100원/톤	1~2주	건설쓰레기처리장
농업쓰레기	농업쓰레기	매립	한국환경자원공사	100원/톤	1~2주	농업쓰레기처리장
자동차쓰레기	자동차쓰레기	매립	한국환경자원공사	100원/톤	1~2주	자동차쓰레기처리장
전자제품쓰레기	전자제품쓰레기	매립	한국환경자원공사	100원/톤	1~2주	전자제품쓰레기처리장
식품쓰레기	식품쓰레기	매립	한국환경자원공사	100원/톤	1~2주	식품쓰레기처리장
의료쓰레기	의료쓰레기	매립	한국환경자원공사	100원/톤	1~2주	의료쓰레기처리장
화학제품쓰레기	화학제품쓰레기	매립	한국환경자원공사	100원/톤	1~2주	화학제품쓰레기처리장
유류쓰레기	유류쓰레기	매립	한국환경자원공사	100원/톤	1~2주	유류쓰레기처리장
기타	기타	매립	한국환경자원공사	100원/톤	1~2주	기타쓰레기처리장

Recycle related law information (by.RRM)



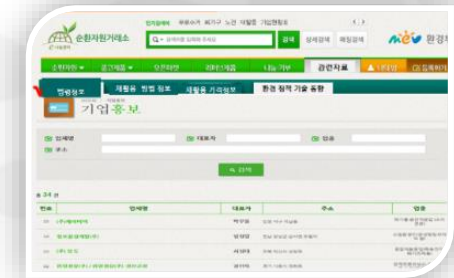
Recycle method information (by.RRM and associations and businesses)



Trend of recycle costs (by. Environmental statistics informaion)



Trend on environmental policy and technology (by. Report of Trend on environmental policy and technology)



Business PR (by. RRM)



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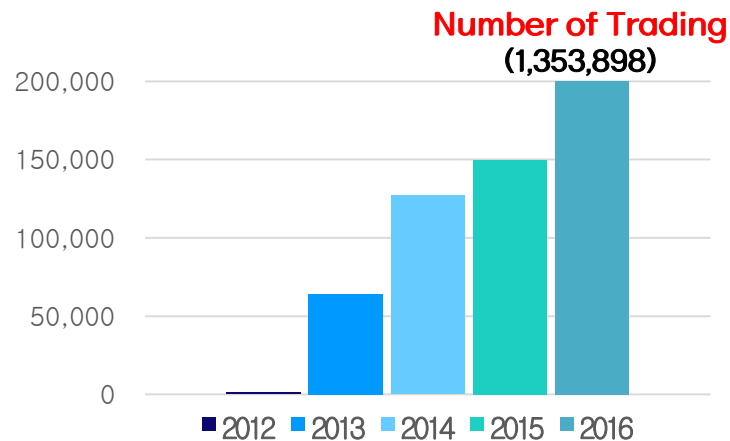
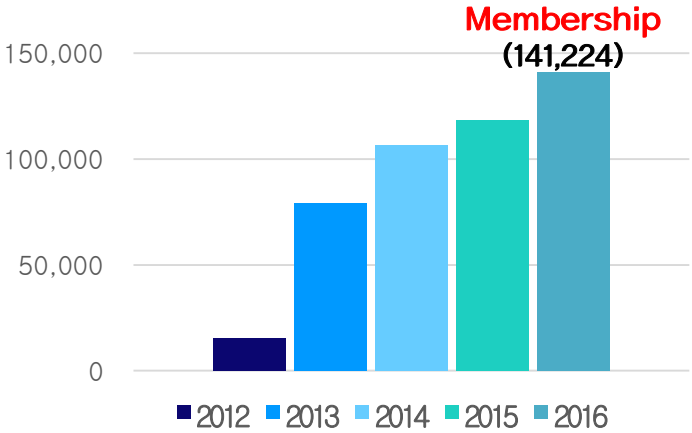
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3-1. Recyclable Resources Market Operation Status



Since the launch of commissioned operation

List		Membership			Trading		
		Total	Waste	Used products	Total	Waste	Used products
Results	No. of cases	141,224	91,727	49,497	1,353,898	1,212,626	141,272
	Amount (KRW1000)	-			14,246,507	13,377,542	868,965



[July 31, 2016]

3-2. Cases of Matching Optimized waste business service



Case 1 (mixed disposal→recycling)

- ✓ dischargers A,B,C which landfill their recyclable resources with other waste due to small amount
- ✓ grouping A, B, C and Collecting together
- ✓ It can be recycled, and save 15ton/year and 1,500dollar

Case 2 (incinerate→reuse)

- ✓ Discharger D' residual products(paper) incinerated with other waste before. D become free supplier for an social group that make a life magazine
- ✓ Reuse 3 ton/year



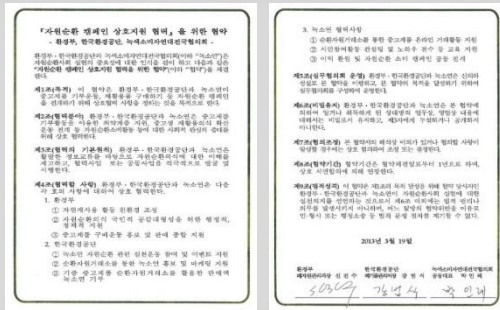
Case 3 (long distance →short distance)

- ✓ Discharger E disposal waste in long distance change
- ✓ Disposal in short distance
- ✓ Save transportation fee 50dollar/ton

3-2. Business Agreement to Promote the Recyclable Resources

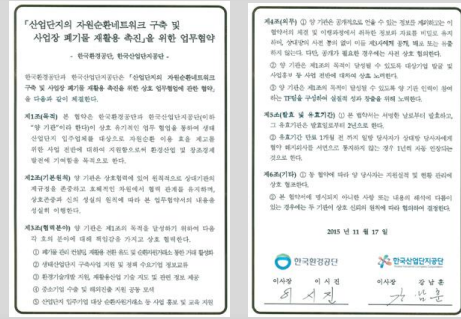
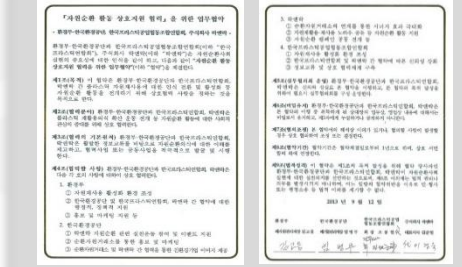


Mutual cooperation of environmental organizations, associations, private groups and other to promote resource- Recycling Society



March, 2013
KECO-Green Consumer Network
 made the business agreement to promote the Recyclable Resources Market

Sept. 2013,
KECO-KFPIIC-LOCK&LOCK
 made a business agreement to cooperate in resource circulation



Nov, 2015,
KECO-KICOX EIP complex
 made the business agreement to promote business waste reuse and recycle



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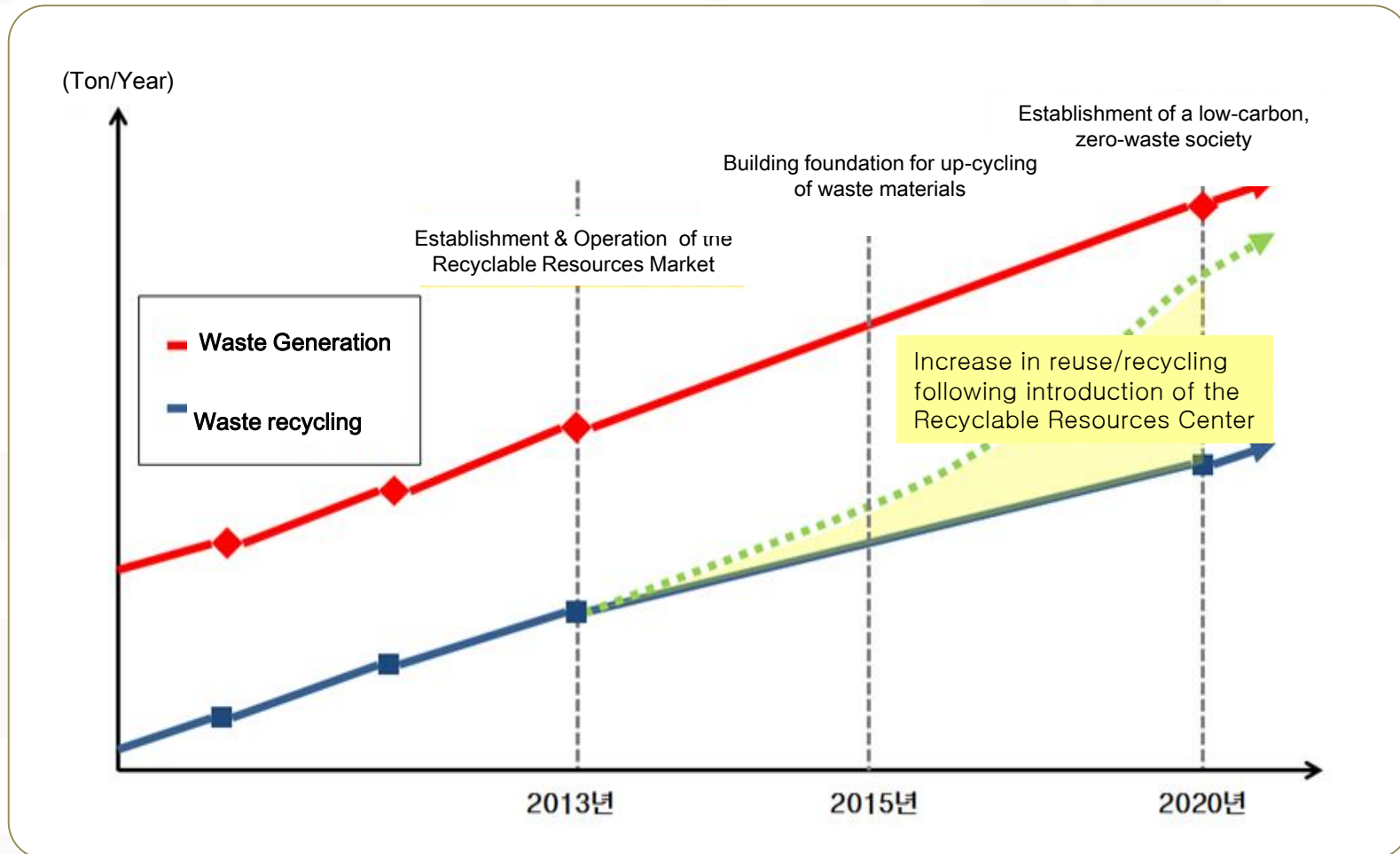


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4-1. Expected Effects



Increase of reuse/recycle with the Recyclable Resources Market



4-2. Economic & Social Benefits



Economic profits from the increase of waste reuse rates

5% increase of resource circulation



구분	Industrial/Construction Waste
Economic profits (KRW 100million)	3.316 billion dollar
Employment (1person/KRW 1billion)	10,443 persons

Analysis of the actual investigation on synthetic resin wastes and benefits



- **330,000tons** of wastes are incinerated every year
- **KRW 66 billion** are wasted every year (incineration fee average KRW 200,000/ton)



70% reuse case

- KRW 170 billion profits every year
- Petroleum substitution + recycling materials + decrease GHG
- 465 job creations
- 536,000 tons of CO₂ decreased
- Equivalent to 113 million pines

4-3. Future Plans for the Recyclable Resources Market



Operation of the Recyclable Resources Information Center as the Information Complex Center for Recycle and Reuse Resources

- Enforcement of 「the Basic Resource Circulation Laws」 (January 1, 2018)
- Investigation on community waste production, reusable items, provide recycle information, draw community participations

“Collect and provide recycle related information and prepare circulation support systems”

Step 1 (establishment of foundation)	Step 2 (stabilization)	Step 3 (advancement)
Test build · run	Full-scale run of the Recyclable Resources Market	Expand information provide (Running the Recyclable Resources Information Marketplace)
Synthetic waste resins, used home appliances, furniture, baby products, etc.	All wastes, used items and recycled items	Provide waste resources, recycle information and expand additional services
2012 ~ 2013	2014~2015	2016 ~

감사합니다.
Thank You.

