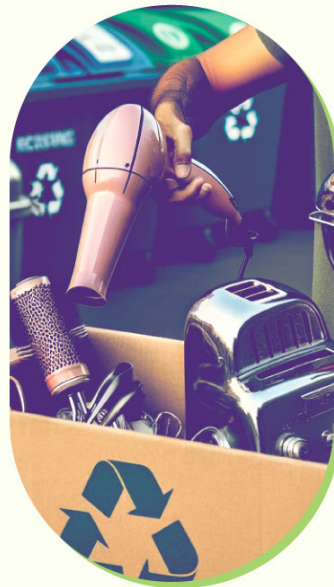




DELIVERABLE D2.1

BEST PRACTICE COLLECTION INITIATIVES BOOKLET



DATE - 17.11.2023



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ABBREVIATIONS

Abbreviation	Definition
B2B	Business to Business
B2C	Business to Consumer
BE	Belgium
CENELEC	European Committee for Electrotechnical Standardization
CH	Switzerland
DE	Germany
EC	European Commission
EEE	Electrical and Electronic Equipment
End of Life	End of Life
EPR	Extended Producer Responsibility
ES	Spain
EU	European Union
EUR	Euro
FR	France
IE	Ireland
IT	Italy
kg	Kilogram
KPI	Key Performance Indicator
MS	Member State
MT	Malta
NL	Netherlands
NO	Norway
p4r	Preparation for reuse
PAYT	Pay as You Throw
PC	Personal Computer
PRO	Producer Responsibility Organisation
RO	Romania
SI	Slovenia
UEEE	Used Electrical and Electronic Equipment
UK	United Kingdom
UNITAR	United Nations Institute For Training and Research
WEEE	Waste of Electrical and Electronic Equipment

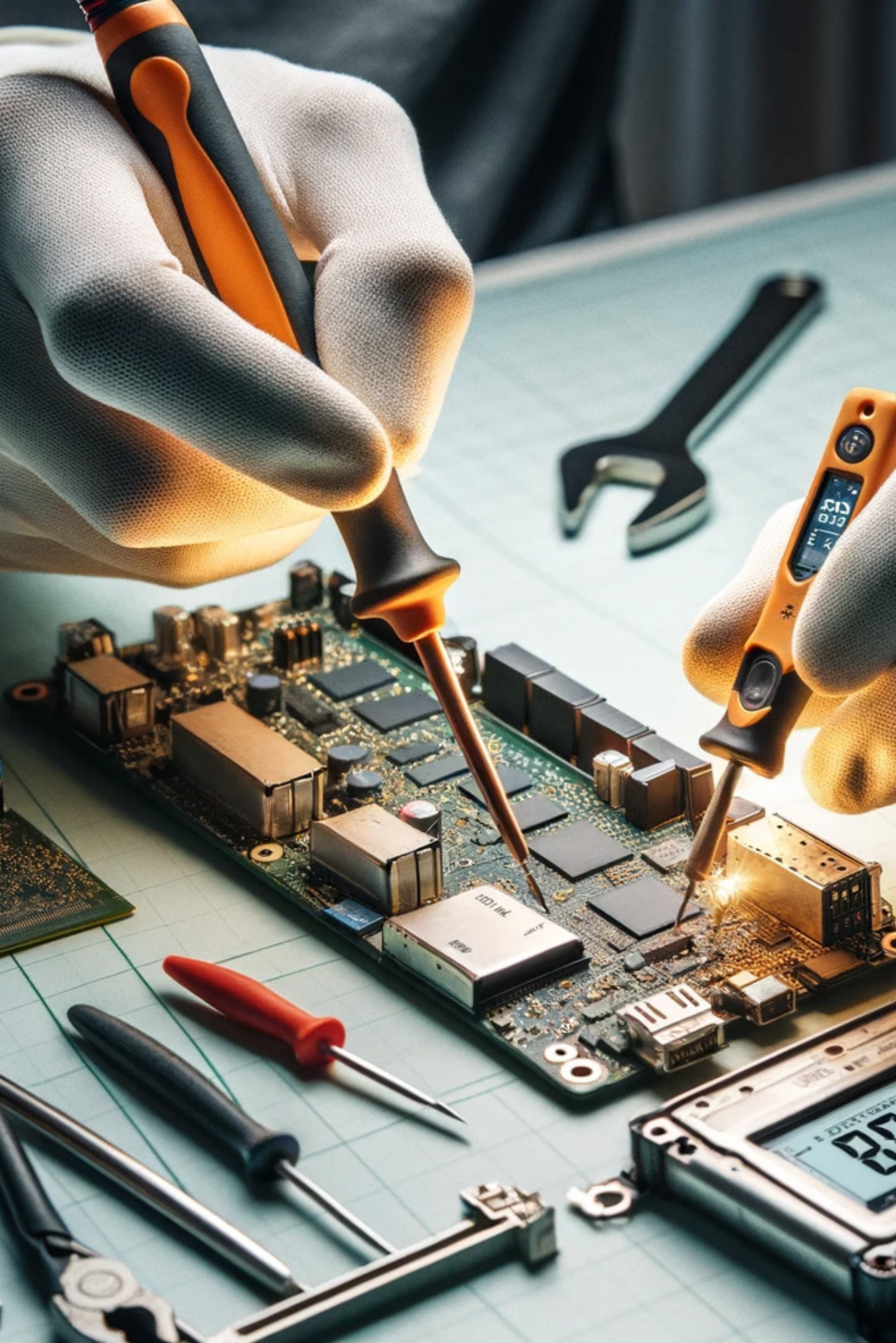


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06
09

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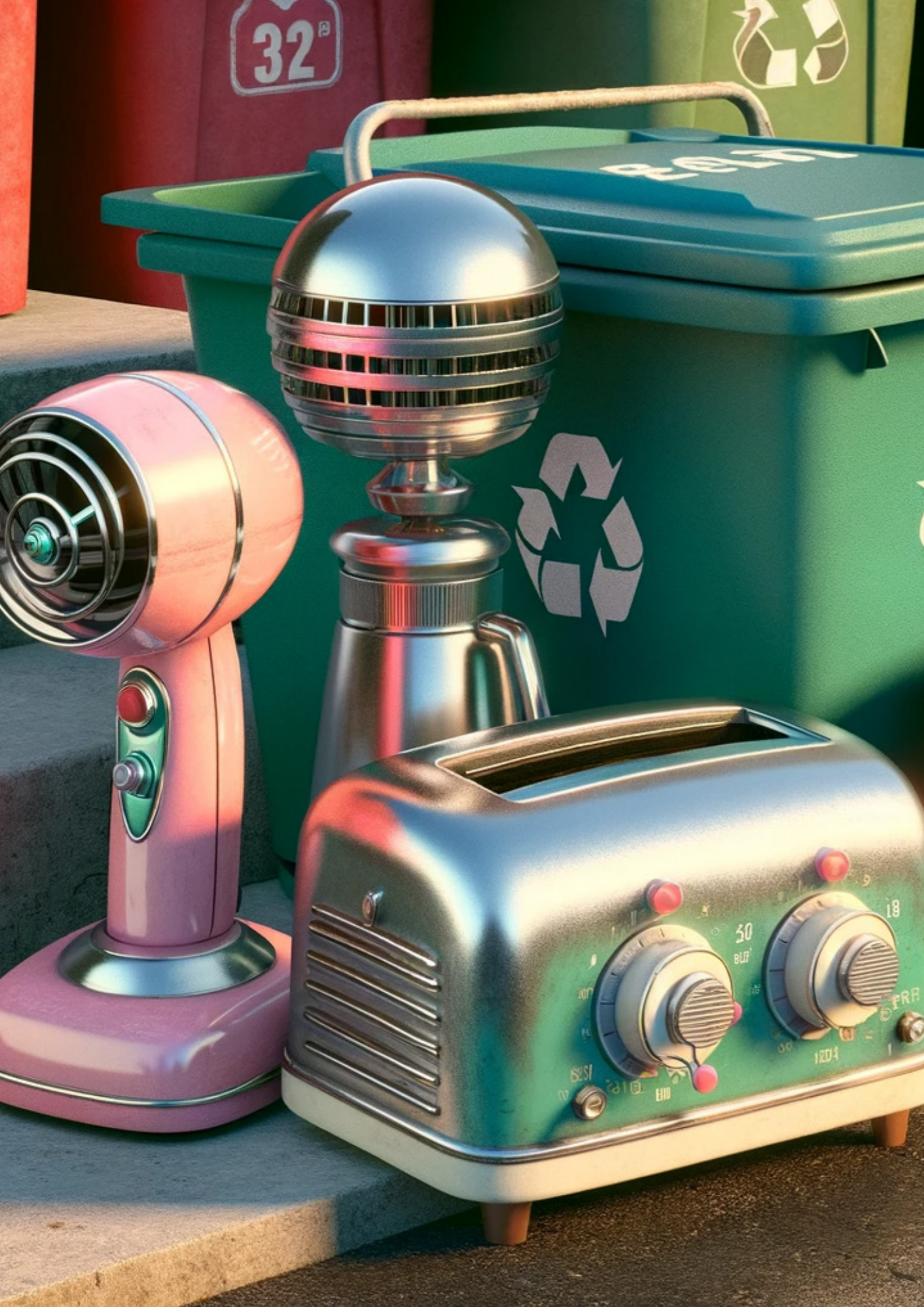
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PARTNERS

Partners	
WEEE FORUM	Waste Of Electrical And Electronical Equipment Forum Aisbl - WEEE Forum (Belgium)
UNITAR	United Nations Institute For Training And Research (Switzerland)
SPI	Sociedade Portuguesa De Inovacao Consultadoria Empresarial E Fomento Da Inovacao Sa (Portugal)
RAMBOLL	Ramboll Deutschland GmbH (Germany)
ECO	Erion Compliance Organization Scarl (Italy)
ECYCLE	Appliances Recycling S.A. (Greece)
ECOTIC	Asociația Ecotic (Romania)
ELECTRÃO	Electrão – Associação De Gestão De Resíduos (Portugal)
GRS Batterien	Stiftung Gemeinsames Rucknahmesystem Batterien (Germany)
Stichting OPEN	Stichting Organisatie Producentenverantwoordelijkheid E-Waste Nederland (Netherlands)
ZEOS DOO	Zeos Ravnanje Z Elektricno In Elektronsko Opremo Doo (Slovenia)
WEEE Ireland	Waste Electrical And Electronic Equipment Ireland (Ireland)
Ecologic	Ecologic (France)
Ecosystem	Ecosystem (France)
Recupel	Recupel Aisbl (Belgium)
RENAS AS	Renas As (Norway)
Stiftung SENS	Sens Foundation (Switzerland)



CHAPTER 1 INTRODUCTION



INTRODUCTION

This booklet describes selected best practice initiatives for the collection of small WEEE and portable batteries implemented within Europe. It is aimed at inspiring producers, PROs and distributors of WEEE and batteries, and policy makers in the organisation of similar initiatives.

WHAT IS CONSIDERED “BEST PRACTICE”

At the beginning of this work stands the question of what to consider best practice for the collection of small WEEE and batteries in the context of this report. For this purpose the following key criteria have been defined and at least one of them has to be fulfilled by a collection initiative to be considered best practice:

- 1.** The collection initiative and/or campaign complement and go above the legally mandatory requirements of 1:1 and 1:0 collection (for large and small equipment respectively) for distributors.
- 2.** The collection initiative and/or campaign targets a specific group of actors (i.e., households, companies, schools, etc.) through one or multiple of the following incentive types: financial incentives, convenience incentives, other incentives to improve collection rates of small WEEE and/or batteries.
- 3.** The collection initiative and/or campaign actively engages relevant stakeholders such as producers of WEEE/batteries, distributors of WEEE/batteries, public authorities, and decision makers, to improve collection rates of small WEEE and/or batteries.

It should be noted that success rates of collection initiatives measured through KPIs such as collection volumes were not taken into account for the selection of best practice initiatives, as they were not comparable across incentives implemented in different MS and across different incentive types.

It should furthermore be noted that the best practices identified and presented in the following have been designed in the context of specific national legislation, markets, culture, and geographies and might work differently in other national or regional contexts. This brochure is therefore intended as an inspiration and encouragement to develop and test collection practices in other Member States.

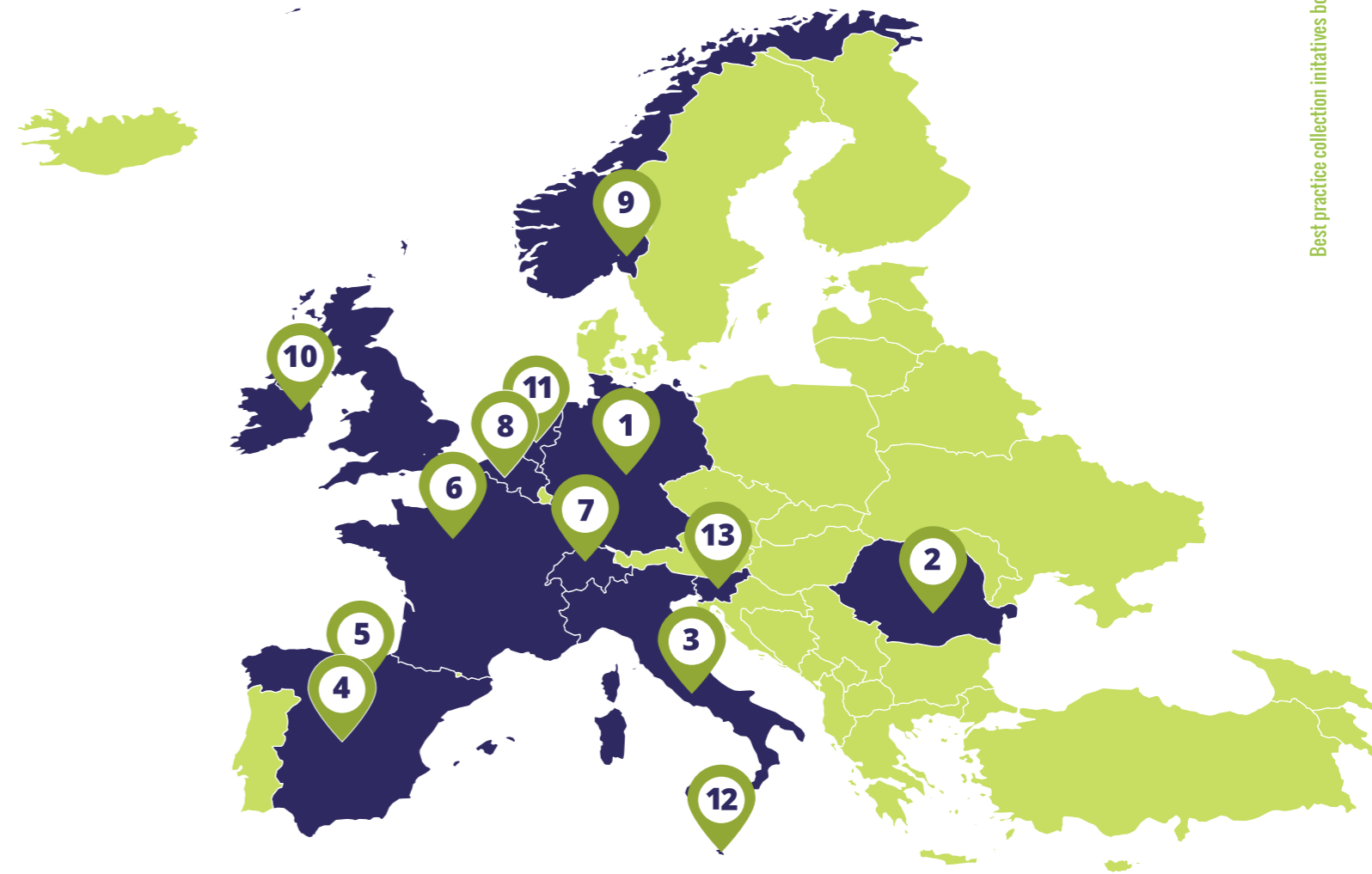
CLASSIFICATION AND PRESENTATION OF INITIATIVES

- Collection systems based on reward incentives offer an economic benefit or gain to the user in return for small EEE/WEEE and batteries handed in. Such benefits or gains are not limited to monetary compensation but can also include coupons, reductions, refunds etc.
- Collection systems based on convenience incentives contain elements that aim to make the handing in of small EEE/WEEE and batteries practically easier or less time-consuming i.e. convenient for individuals or organisations, and thus more attractive. Examples are pick-up services, drop-off points, hand-over location search engines (online) etc.
- Collection systems based on other incentives are either connected to charity, other good causes or contests which may bring individuals or organisations to hand-in their small EEE/WEEE and batteries. This may also include additional raised awareness for end-of-life costs expressed to the consumer through a visible fee.

The analysis has shown that in the case of the selected initiatives the third category ('other incentive') is always linked to the first ('reward incentive') or second ('convenience incentive') category. Therefore, the following chapters are only divided into 'reward incentives' and 'convenience incentives' both including other incentives as well. Other benefits such as 'awareness raising' are included in these chapters as well.

In the presentation of the initiatives in the following chapters, special attention is given to enabling factors for the success of the initiatives as well as challenges encountered, and lessons learned to facilitate replication of the initiatives and pilot projects in different EU MS. The assessment of scalability and replicability is based on the qualitative evaluation of stakeholders during the interviews and is not based on further data evidencing the claims. Scalability is the ability of a system to grow larger, while replicability is the ability of system to be duplicated at another location or time.

GEOGRAPHICAL OVERVIEW OF BEST PRACTICE INITIATIVES



Initiative name

- | | |
|--|---|
| 1 Deposit System by Shift (DE) | 8 'Pick-Up service' by Recupel (BE) |
| 2 'Little ones do great deeds' by Ecotic (RO) | 9 'Secure boxes' by Norsirk (NO) |
| 3 'Energia al cubo' by Erion (IT) | 10 Retailer takeback by WEEE Ireland (IE) |
| 4 School collection by Ecopilas (ES) | 11 'Kringloopwinkel' bring points by Stichting Open (NL) |
| 5 'Gestores intermedios' by Ecopilas (ES) | 12 'WEEE Trolley' bring points (MT) |
| 6 'Téléphones solidaires' by Ecologic France (FR) | 13 Depot container bring points by Zeos (SI) |
| 7 'ElectroBag' by SENS (CH) | |

OVERVIEW OF INCENTIVE TYPES APPLIED

	Deposit return scheme	Direct payment (monetary)	Other reward (non-monetary)	Postal service	Pick up service	Bring points	EEE donation (charity)	Visible fee	Contest/ Raffle
Initiative name	Reward incentive			Convenience incentive			Other incentive		
Deposit System by Shift (DE)	x			(x)					
'Little ones to great deeds' by Ecotic (RO)			x			x			x
'Energia al cubo' by Erion (IT)	(x)	x							x
School collection by Ecopilas (ES)			x						x
'Gestores intermedios' by Ecopilas (ES)	x								
'Téléphones Solidaires' by Ecologic France (FR)				x			x		
'Pick-Up service' by Recupel (BE)					x				
'Secure boxes' by Norsirk (NO)						x			
Retailer takeback by WEEE Ireland (IE)						x		x	
'Kringloopwinkel' bring points by Stichting open (NL)						x	(x)		
'WEEE Trolley' by WEEEMalta (MT)						x			
Depot container bring points by Zeos (SI)						x			
ElectroBag' by SENS (CH)				x					
	1	2	3	3	1	6	2	1	3



OVERVIEW OF INCENTIVE TYPES APPLIED

	Preparation for re-use	Re-use	Recycling	B2C	B2B	Small WEEE	Used small EEE	Batteries	SCALABILITY	REPLICABILITY
Initiative name	Treatment fate			Target customer		Target stream			SCALABILITY	REPLICABILITY
Deposit System by Shift (DE)		x	x	x		x	x		Medium	Medium
'Little ones to great deeds' by Ecotic (RO)			x	x		x		x	Medium	High
'Energia al cubo' by Erion (IT)			x	x				x	Medium	High
School collection by Ecopilas (ES)			x	x				x	Medium	High
'Gestores intermedios' by Ecopilas (ES)			x		x			x	Low	High
'Téléphones Solidaires' by Ecologic France (FR)	x	x	x	x		x	x		Medium	High
'Pick-Up service' by Recupel (BE)	x		x		x	x			Medium	High
'Secure boxes' by Norsirk (NO)	x	x	x	x	x	x	x		Medium	Medium
Retailer takeback by WEEE Ireland (IE)			x	x		x			Low	Medium
'Kringloopwinkel' bring points by Stichting open (NL)		x	x	x		x	x		Medium	High
'WEEE Trolley' by WEEEMalta (MT)			x	x		x			Low	High
Depot container bring points by Zeos (SI)			x	x		x			Medium	High
ElectroBag' by SENS (CH)	x		x	x		x			High	Medium
	4	4	13	11	3	10	4	4		

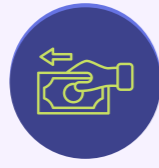


LEGEND OF ICONS

INCENTIVE TYPES



Deposit return scheme



Direct payment (monetary)



Other reward (non-monetary)



Awareness



Postal service



Pick up service



Bring points



EEE donation (charity)



Visible fee



Contest/ Raffle

FATE OF COLLECTED EQUIPMENT



Preparation for re-use



Recycling



Re-use

TYPE OF COLLECTED EQUIPMENT



Small IT



Small Household appliances



Batteries

CONSUMER GROUP



B2B



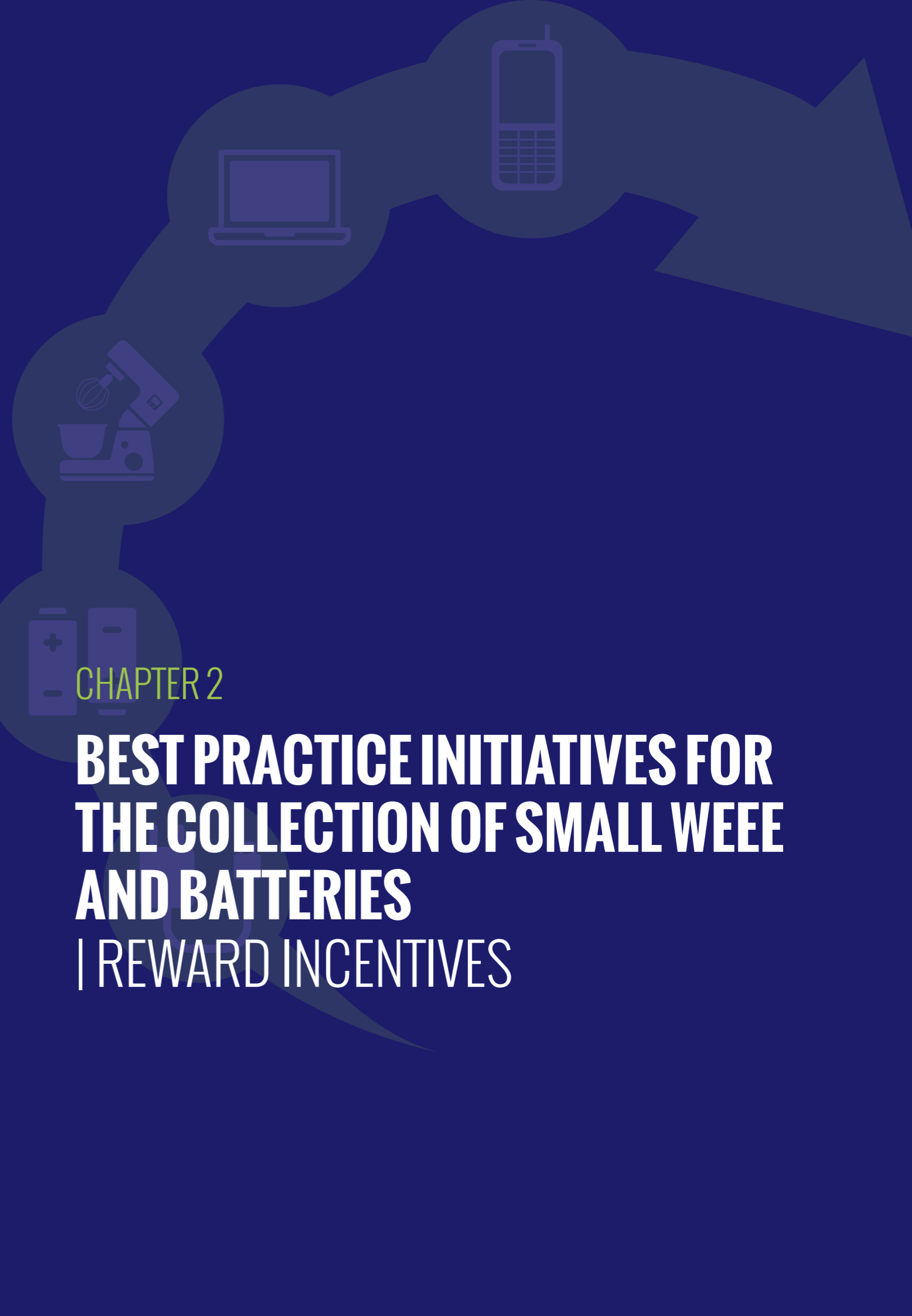
B2C





CHAPTER 2

BEST PRACTICE INITIATIVES FOR THE COLLECTION OF SMALL WEEE AND BATTERIES | REWARD INCENTIVES



BEST PRACTICE INITIATIVES FOR THE COLLECTION OF SMALL WEEE AND BATTERIES | REWARD INCENTIVES

SHIFT DEPOSIT SYSTEM (DE)



<https://www.shiftphones.com/13-shiftcycles-teil-3-2/>
<https://shop.shiftphones.com/shift6mq.html>

DESCRIPTION

SHIFT GmbH is a German manufacturer of smartphones, phablets (mix of phone and tablet), detachable notebooks, chargers, bikes and other products which focuses on producing modular, and repairable devices. With the purchase of a SHIFT device, consumers are charged with a deposit return scheme (DRS) fee which is visible on the bill. After the first life of the SHIFT device, consumers can reclaim the deposit fee, plus an extra amount depending on the state of the device.

OPERATIONS

SHIFT offers a deposit fee for its devices, which customers can claim back by sending the device to SHIFT or its repair shop. The deposit fee is a voucher (22 EUR) or cash amount (18 EUR). The amount was calculated based on life cycle assessment (LCA) of the product. Customers may also get an extra amount depending on the device's condition and age. The device must be sent in original packaging to claim the full deposit fee. Customers should charge the battery and reset the device before sending it back. SHIFT then refurbishes or repairs the device. When the phone is refurbished or repaired, a new operating system is installed, and remaining data is deleted.

REWARD INCENTIVES

INCENTIVE TYPES



Deposit return scheme



Postal service

FATE OF COLLECTED EQUIPMENT



Preparation for re-use



Recycling

TYPE OF COLLECTED EQUIPMENT



Small IT

CONSUMER GROUP



B2C

SCALABILITY: MEDIUM

REPLICABILITY: MEDIUM

NAME OF OPERATOR: SHIFT

MAIN ACTORS: SHIFT, POST OFFICE, RECYCLERS, BATTERY SCHEME, NON-FOR-PROFIT ORGANIZATIONS (E.G., "ARBEIT FÜR MENSCHEN MIT BEHINDERUNG")

2014-ONGOING

WHY BEST PRACTICE?

The initiative is considered best practice as it makes use of a DRS fee to incentivize customers to return their end-of-life devices.

SUCCESS RATE AND KPIS

Of the 80,000 units of SHIFT phones sold since 2014, 5,000-10,000 have been returned through the DRS system.

ENABLERS

The **financial incentive** of at least 18 or 22 euros encourages consumers to return their device. However, some of this can also be explained by an **environmental incentive** since many of SHIFT phone's customers may be environmentally conscious and have a high intrinsic motivation to support re-use & recycling.

Convenience return: Devices can be returned via post back to SHIFT.

SHIFT's focus on not only economic targets but environmental ones enable them to provide a solution to their customers and be responsible for their products.

SHIFT's **cooperation with partners**, such as with the post office, recyclers, battery take-back schemes, non-for-profit organizations (e.g., Afb), universities for research etc.), helps them to provide a holistic solution for their customers with the DRS.

CHALLENGES

To tackle the issue of data protection on phones, SHIFT asks their customers to erase all data and to reset their phone to factory settings before sending it in. For second hand use a new operating system is installed during refurbishment, and remaining data is deleted.

SCALABILITY

According to SHIFT, a DRS system can be implemented and is scalable in other countries and for other products as well.

REPLICABILITY

The initiative is replicable but is highly dependent on the manufacturer's motivation.

LESSONS LEARNED

There is a difficulty to persuade customers to pay more compared to the competition as sometimes the overall benefit is not directly obvious. The more expensive devices according to the company can be justified when thinking about the DRS as also the whole circular approach of the company (repairability, social and environmental responsibility).

LINKS

<https://www.shiftphones.com/en/>

<https://net.shift.eco/>

Similar initiatives mapped

Téléphones Solidaires Postal Service (FR) (see convenience incentive section)

'ElectroBag Postal Service (CH) (see convenience incentive section)

LITTLE ONE'S DO GREAT DEEDS AND ECOTERRIANS (RO)



<https://www.ecotic.ro/en/project/and-the-little-ones-do-great-deeds/>



Ecoterrians; Source ECOTIC

DESCRIPTION

Competitions are organized in schools and kindergartens for the collection of batteries/WEEE. There are prizes associated with the competitions and the programmes also include educational pieces and lessons.

OPERATIONS

ECOTIC collaborates with municipalities and directly with schools. At the schools, local coordinators regularly follow up with the teachers to increase participation. ECOTIC works with many treatment operators and chooses the one closest to the campaign/school to minimize transportation costs. The collected batteries/small WEEE are directed to recycling facilities.

REWARD INCENTIVES

INCENTIVE TYPES



Other reward
(non-monetary)



Contest/ Raffle



Bring points

FATE OF COLLECTED EQUIPMENT



Recycling

TYPE OF COLLECTED EQUIPMENT



Batteries

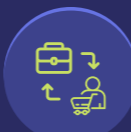


Small IT



Small Household
appliances

CONSUMER GROUP



B2C

SCALABILITY: MEDIUM

REPLICABILITY: HIGH

NAME OF OPERATOR: ECOTIC

MAIN ACTORS: ECOTIC, MUNICIPALITIES,
SCHOOLS, KINDERGARTENS

01/2020 - ONGOING

WHY BEST PRACTICE?

The campaigns increase awareness in the population that batteries and WEEE should be sorted and returned through separate collection system and not thrown away in the trash. They also help to build a relationship with the municipalities.

SUCCESS RATE AND KPIS

In the kindergarten initiatives, the weight of batteries collected increased linearly. With 200 kindergartens, 6.5 tons of batteries were collected and with 400 kindergartens, 13 tons of batteries were collected. In the last school campaign 75 tons of WEEE were collected in one school year. However, the collection amount through the campaigns is small compared to the overall collection through municipal and retail routes in order to achieve the collection targets set out in legislation. The amount collected through campaigns makes up less than 1-2% of ECOTIC's overall collection amount.

ENABLERS

ECOTIC collaborates closely with municipalities, and with schools directly. For the kindergarten and school, ECOTIC works with local coordinators that check in on the teachers and schools. Through this, they have seen participation rise from 80 to 250 schools (out of 300 registered schools).

CHALLENGES

One challenge is to teach people that batteries or small WEEE do not belong in the residual waste, i.e., increasing the awareness level and promoting existing infrastructure of PROs is required. With the kindergarten and school initiatives ECOTIC is raising awareness amongst the youngest in the society.

SCALABILITY

The initiatives in schools and kindergartens could be scaled up. However, such on-site initiatives involve logistics for safe handling and transportation of the collected small WEEE and batteries and it is difficult to find suitable logistics providers, which is limiting the scalability.

REPLICABILITY

The initiative is feasible for replication in other countries.

LESSONS LEARNED

In schools, it is very important to have good communication to increase active involvement. It is better to motivate the schools through fixed prizes (a prize after a certain weight of WEEE and batteries are collected) instead of giving prizes to the top number of schools.

The teachers are motivated to participate because they can receive a certificate they add to their professional portfolio. The prizes are awarded after a certain number of sustainability lessons are delivered (when 6 out of 15 are completed). The teachers integrate the provided lesson plans into the green week that exists in Romanian schools for sustainability related topics.

Additionally, it helps for completion of the initiative if a timeline is provided (e.g., finish 3 lessons before January) and for specific activities and projects to be integrated into the lesson plan.

LINKS

<https://www.ecotic.ro/en/>

Similar initiatives mapped

Energia al cubo by Erion (IT)

Ecopilas school collection of batteries (ES)

ENERGIA AL CUBO REWARD INCENTIVE (IT)



Source: Erion

DESCRIPTION

Energia al cubo is an awareness campaign on the proper collection of portable batteries and accumulators. There were four pilots performed in four regions of Italy that consisted of a battery collection challenge between municipalities, citizens or schools. The winners received a prize.

OPERATIONS

For the pilot challenge between municipalities, 6 municipalities were chosen and were provided with boxes by Erion. The boxes were then taken to a collection point in each municipality and weighed. This pilot was done in cooperation with the municipal waste collection company.

The pilot challenge between citizens was also done in cooperation with the municipal waste collection company. Citizens were given 2 months to take their batteries to a municipal collection point and the 100 citizens that gathered the most won prizes, paid for by Erion. There was also collaboration with local media outlets to advertise the initiative.

The pilot challenge between schools was also done in cooperation with the municipal waste collection company. Students were taught about Batteries, WEEE and recycling, and then the schools competed against each other to win prizes for the school. The collected batteries are directed to recycling facilities.

REWARD INCENTIVES

INCENTIVE TYPES



Other reward
(non-monetary)



Contest/ Raffle



Awareness

FATE OF COLLECTED EQUIPMENT



Recycling

TYPE OF COLLECTED EQUIPMENT



Batteries

CONSUMER GROUP



B2C

SCALABILITY: MEDIUM

REPLICABILITY: HIGH

NAME OF OPERATOR: ERION

MAIN ACTORS: ERION, MUNICIPALITIES,
MUNICIPAL SECTORS (E.G., WASTE
MANAGEMENT COMPANY, SCHOOLS),
CONTRACTORS

02/2022 - 12/2022

WHY BEST PRACTICE?

Energia al cubo is considered a best practice as it significantly increased the collection rate in the regions it was performed in.

SUCCESS RATE AND KPIS

Compared to the same time period in the year before, each pilot project area saw a significant increase in collection rate (measured in mass): Florence (+10,85%), Rimini area (+29,00%), Massa Lubrense - near Naples (+195%), 6 municipality challenge in Emilia Romagna (+33%). Reasons for the differences in success rates can be found in multiple factors such as demographic differences between the municipalities leading to higher or lower engagement, or low baseline collection of Batteries. Combined, this project increased the collection by of 32.71% (73.337 to 97.323 kg).

ENABLERS

A close collaboration with municipalities and municipal sectors (e.g., waste management company, schools) which were approached by Erion contributed significantly to the success. A separate company was contracted to support coordinating with all pilots (e.g., for setting up info points) and to ease Erion's work.

CHALLENGES

The challenges that came with the initiative include organization, logistics, and collaboration with the municipalities. This includes, for example: where to put the ecopoints (includes both collection centres and information communication centres) while ensuring safety, and how to organize the project itself. Erion was also faced with economic challenges including the financing of the ecopoints.

SCALABILITY

The initiative is scalable but if repeated in the same area, the collection rates will vary, probably resulting in less collection. The schools or municipalities included in these challenges should hence be varied.

REPLICABILITY

The replicability is assumed to be high, especially because other member states have done similar projects as well (BE; RO; ES; etc).

LESSONS LEARNED

Although the pilots allowed to increase the collection, the pilots are heavily costly (e.g., costs for communication activity, communication materials, coordination, collection boxes, prizes, etc.)

LINKS

<https://erion.it/en/>

Similar initiatives mapped

'Little ones do great deeds' and
'Ecoterrians' School' by Ecotic (Ro)

Ecopilas school collection of batteries (ES)

SCHOOL BATTERY COLLECTION (ES)



<https://www.ecopilas.es/en/la-segunda-edicion-de-la-campana-pilabot-ya-esta-en-marcha-en-galicia-3/>



<https://www.ecopilas.es/en/clubes-y-escuelas-nauticas-de-toda-espana-recogen-1-200-kilos-de-pilas-usadas-para-su-reciclaje-3/>

DESCRIPTION

Ecopilas collaborates with municipalities and other PROs to set up initiatives in schools in Catalonia, Galicia, and Valencia. In these places students are encouraged to bring batteries from home to be recycled and the school that performs the best gets a prize. Ecopilas also organizes its own initiatives in some schools and some summer sailing schools. In these cases, the prize is related to sport equipment or trees that are planted.

OPERATIONS

The initiatives are set up in collaboration with the region/ municipality and other PROs. In the school initiatives the children collect batteries from home and the competition is based on the volume of batteries collected. A communication agency is also contracted to develop materials for the initiative. The collected batteries are directed to recycling facilities.

REWARD INCENTIVES

INCENTIVE TYPES



Other reward
(non-monetary)



Contest/ Raffle



Awareness

FATE OF COLLECTED EQUIPMENT



Recycling

TYPE OF COLLECTED EQUIPMENT



Batteries

CONSUMER GROUP



B2C

 **SCALABILITY:** MEDIUM

 **REPLICABILITY:** HIGH

NAME OF OPERATOR: ECOPILAS

MAIN ACTORS: ECOPILAS, MUNICIPALITIES,
SCHOOLS, OTHER PROS

2016 - ONGOING

WHY BEST PRACTICE?

Some increase of the collection volume was realized due to the initiative; however, the main positive aspect of the initiative is the increased awareness amongst participants.

SUCCESS RATE AND KPIS

Although the initiative has resulted in some increase in collection volume, it is unclear how much more is collected at schools that would not otherwise be collected at other collection sites. However, there are increases in awareness.

ENABLERS

Ecopilas works with municipalities and other PROs to run school initiatives in Catalonia, Galicia, and Valencia. The incentives are prizes, sports equipment or trees planted by Ecopilas.

CHALLENGES

Ecopilas report that a future challenge is the change in the EU battery regulation setting out that the definition of portable batteries will change from 1kg to 5kg, which increases the volumes of batteries that need to be covered by the system and poses new requirements on the collection receptacles currently in use.

SCALABILITY

The initiative does not produce the same level of results in regions where it has already been in place for several years, i.e., scalability is only feasible by changing location.

REPLICABILITY

Since similar initiatives exist in other EU Member States, the replicability is proven.

LESSONS LEARNED

The collection rate decreases after the initiative has been in place at the same schools for many years, showing that the location of the school initiative should change semi-frequently and/or that the initiative set up should be changed every couple of years in the areas it has been established.

LINKS

<https://www.ecopilas.es/en/home/>

Similar initiatives mapped

'Little ones do great deeds' and
'Ecoterrians' School' by Ecotic (Ro)
Energia al cubo by Erion (IT) (batteries)

GESTORES INTERMEDIOS BATTERY COLLECTION FROM WEEE (ES)



Source: Unsplash

DESCRIPTION

Ecopilas pays WEEE dismantlers and other professional waste collectors a fixed amount per ton of portable batteries collected.

OPERATIONS

WEEE dismantlers and other professional waste collectors are paid a fixed amount per ton of portable batteries collected. Volumes above 3 tons are incentivized with higher per ton prices. This fee also includes the handling and transport of the batteries to the battery sorting facilities.

Ecopilas has a contract with the sorting facilities through a public tender every 3-4 years. Under this contract, the sorting facilities are responsible for further processing of the batteries through a contract with a recycler that must be approved by Ecopilas.

REWARD INCENTIVES

REWARD INCENTIVES

INCENTIVE TYPES



Direct payment
(monetary)

FATE OF COLLECTED EQUIPMENT



Recycling

TYPE OF COLLECTED EQUIPMENT



Batteries

CONSUMER GROUP



B2B

SCALABILITY: LOW

REPLICABILITY: HIGH

NAME OF OPERATOR: ECOPILAS

MAIN ACTORS: ECOPILAS, CONSULTANT COMPANY, WASTE COLLECTORS, WEEE DISMANTLERS/RECYCLERS

2018 - ONGOING

WHY BEST PRACTICE?

The initiative targets dismantlers that recover batteries from other waste products, especially WEEE, instead of battery collection from households, thereby targeting a battery stream which is left inside of WEEE instead of removed from the equipment and separately collected.

SUCCESS RATE AND KPIS

This initiative currently makes up approximately 20% of the portable battery collection stream of Ecopilas.

ENABLERS

The fees the dismantlers receive include the cost for transporting and collecting so that Ecopilas has no further effort or costs to receive the batteries. Moreover, the fee for the batteries is a fixed one and is not increased annually.

Initially, Ecopilas identified whom to involve through a good collaboration with recyclers and the recycler's team's contacts. After 3 or 4 years, they contracted a consultant company to do a public announcement to identify additional waste collectors and WEEE dismantlers.

CHALLENGES

A major challenge is the increasing amount of lithium batteries in the battery waste stream as they can cause fires and thus need separate containers. Ecopilas is currently developing procedures for retailers who collect lithium batteries to enable them to remain compliant.

SCALABILITY

The scale up of Gestores Intermedios is limited because they have reached many of the big waste sorters already. When the program was first implemented, Ecopilas saw increases in the collection of batteries. However now there is not much room for improvement and the volumes that are collected are quite stable.

REPLICABILITY

Since similar initiatives exist in other EU Member States, the replicability is proven.

LESSONS LEARNED

The setup of the initiative, including pricing, is working well. However, a certain limit of scalability has been reached.

LINKS

<https://www.ecopilas.es/en/home/>

Similar initiatives mapped

'Little ones do great deeds' and 'Ecoterrians' School' by Ecotic (Ro)
Energia al cubo by Erion (IT) (batteries)

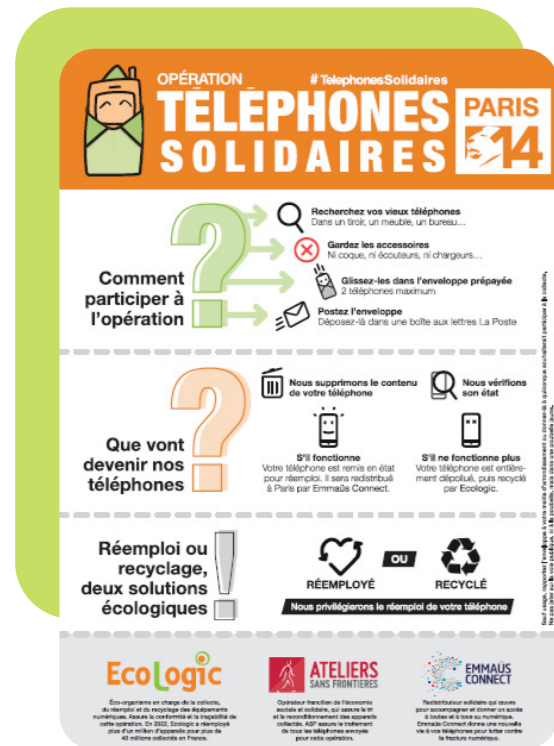


CHAPTER 3

BEST PRACTICE INITIATIVES FOR THE COLLECTION OF SMALL WEEE AND BATTERIES | CONVENIENCE INCENTIVES



TÉLÉPHONES SOLIDAIRES POSTAL SERVICE (FR)



DESCRIPTION

The Téléphones Solidaires Postal Service initiative was a pilot and experiment for a postal service where people could send their old phones for recycling and/ or preparation for re-use. The experiment used a control group and a variable group. The control group received an envelope for their phones, the other group in addition could indicate whether they wanted their phone to be recycled or prepared for re-use.

OPERATIONS

The Téléphones Solidaires project was carried out with the social organization Emmaus Connect and Ateliers Sans Frontières. Ecologic provided an envelope that contained an informative flyer that was distributed, through a supplier, to each building in Paris's 14th arrondissement. Consumers could then use these envelopes to send their phones back. One group was additionally able to choose (through checking a box included in the envelope) whether their phone should be recycled or prepared for re-use.

REWARD INCENTIVES

INCENTIVE TYPES



Postal service



EEE donation (charity)

FATE OF COLLECTED EQUIPMENT



Preparation for re-use



Recycling

TYPE OF COLLECTED EQUIPMENT



Small IT

CONSUMER GROUP



B2C

SCALABILITY: MEDIUM

REPLICABILITY: HIGH

NAME OF OPERATOR: ECOLOGIC

MAIN ACTORS: ECOLOGIC, EMMAUS CONNECT, ATELIERS SANS FRONTIÈRES, THE FRENCH POST, SUPPLIER TO DISTRIBUTE FLYERS

06/2023 - 07/2023

WHY BEST PRACTICE?

This initiative is considered best practice because it allows for people to send back their phones which means higher convenience for returning end-of-life devices. Moreover, the experiment has shown that giving people a choice on the treatment fate of their phone increases the collection rate.

SUCCESS RATE AND KPIS

Approximately 1,500 envelopes, containing approximately 2,500 phones, were sent back.

ENABLERS

There was no financial reward given to the participants but there was the ease of sending back the phone by providing the envelope and making the return free of cost. The group that was given the choice what should happen with their phone returned 30% more phones than the control group. This is an indication that the collection rate can be a matter of information instead of just financial incentives since people feel engaged when they can make choices.

Ecologic highlighted that partnerships are very important for the success of any project and communicating through these partners can also be valuable. For example, the communication through the city itself (i.e., through Paris's Instagram page)

CHALLENGES

Communicating to consumers how exactly data is erased, is a challenge. According to Ecologic, a booth that deletes all data right at the collection point, or a device that consumers could use to delete data on their own at home could be helpful. Hence, they would know exactly how their data is treated. Ecologic considers conducting an experiment where one group is explicitly told their data will be erased and the other is not.

SCALABILITY

The Téléphones Solidaires project is believed to be scalable. Its first iteration ended after 1.5 months, but there are plans to continue because Ecologic has now built-up strong partnerships and wants to try other settings.

REPLICABILITY

Replicability is possible in countries where the shipment of waste (electronics) by post is not prohibited by law.

LESSONS LEARNED

Through this initiative, Ecologic learned that participants were more likely to send their phones back when they were presented with the choice of what would happen to their phones (recycling or preparation for re-use). They additionally found that some of the main reasons why people chose either recycling or preparation for re-use were concerns with data protection and concerns with the environmental impacts of recycling, indicating that information is considered important for consumers and could be later shared through information

LINKS

<https://www.ecologic-france.com/>

Similar initiatives mapped

ElectroBag Postal Service (CH)

Shift Deposit System (DE)

ELECTROBAG POSTAL SERVICE (CH)



Source: SENS eRecycling

DESCRIPTION

Within the “ElectroBag” pilot each household in the Zürich and Bern area was given a plastic bag into which about 5 kg of electrical material fit. The filled bag can be put back into the private mailbox from where it is collected by the postal service. In Geneva the initiative was extended to a re-use project. People were required to put a sticker on the package if the devices in it were potentially suitable for re-use (self-assessment by consumers). Moreover, reusable bags were tested. SENS eRecycling cooperated with the Swiss Post which was also interested in expanding its services and with the Producer Responsibility Organization (PRO) “SWICO” for cell phone recycling. The Swiss Post is paid per kg of WEEE that is taken back through the postal service route. The pilot is now being rolled out nationwide.

OPERATIONS

The postal service was responsible for distributing information flyers and the bag into households’ mailboxes. The filled bags were sent to a sorting centre where they were opened and sorted before being sent to a contracted recycler. Phones were separated during the sorting step and sent to “Kanal SWICO”, the PRO responsible for IT and telecommunication equipment with a recycling department.

REWARD INCENTIVES

INCENTIVE TYPES



Postal service

FATE OF COLLECTED EQUIPMENT



Recycling



Preparation for re-use

TYPE OF COLLECTED EQUIPMENT



Small IT

CONSUMER GROUP



B2C

SCALABILITY: HIGH

REPLICABILITY: MEDIUM

NAME OF OPERATOR: SENS ERECYCLING

MAIN ACTORS: SENS

ERECYCLING, SWISS POST, IT PRO

2021

WHY BEST PRACTICE?

The initiative is considered best practice as it targets devices that are kept at households and are commonly forgotten in drawers. A secondary aim of the initiative was to increase awareness about environmentally sound small WEEE disposal through information that was distributed to each household.

SUCCESS RATE AND KPIS

During the pilot, an interest from the population was visible. From 100,000 distributed bags, SENS eRecycling collected 4,500 bags (4.5%) and recovered 6.5 tons of WEEE and used EEE.

ENABLERS

The main incentive for citizens was the easy take back with the bag which incentivized many to check their drawers and basements.

Since in Switzerland mailboxes with an integrated parcel box accessible to the postal service are common, this facilitated the implementation. As such mailboxes are typical for Switzerland, other countries might have to find other solutions to ensure collection of the electronic equipment without damaging it and possibly hindering preparation for re-use.

SENS eRecycling cooperated with the Swiss Post which was also interested in expanding its services and was looking for new businesses opportunities, i.e., they pushed the pilot as well.

CHALLENGES

One challenge was to avoid the misuse of the bags. This might be more critical in countries in which citizens must pay for residual waste disposal and hence have an incentive to use the ElectroBag for residual waste.

SCALABILITY

In September 2023, SENS eRecycling plans to roll out the pilot on a national scale together with the Swiss post. A bag can then be ordered on demand for a cost of 5 Swiss francs. For the national scale-up, the distribution of sorting and recycling centres is divided regionally.

REPLICABILITY

Replicability is possible in countries where the shipment of waste (electronics) by post is not prohibited by law.

LESSONS LEARNED

Reusable bags were tested in Geneva, with the idea that people should contact SENS eRecycling if interested in a bag. However, this required a higher effort from consumers and led to a lower response rate. The reusable bags (about 50 cm big) used in Geneva were quite robust, but they were much more expensive and were not identifiable as reusable by the customer in all cases. Since the initiative is B2C, the aesthetic is important. Finally, it was decided not to use reusable bags anymore. Alternatively, SENS eRecycling recommends plastic bags which are recyclable or made of recycled material. SENS also realized that a fee is needed to make the initiative economically feasible on the long run, i.e., the initiative must be able to cover its costs if it is supposed to be scaled up and become a long-term project.

LINKS

<https://www.erecycling.ch/>

Similar initiatives mapped

Téléphones Solidaires Postal Service (FR)

Shift Deposit System (DE)

RECUPEL PICK-UP (BE)



Source: Recupel

DESCRIPTION

To collect WEEE generated at offices, schools, retirement homes, etc. which was not effectively collected through existing systems, Recupel set up a free pick-up service. They communicated this new service through radio channels, printed media, and then by mailing specific schools and organizations-grouping schools once they had been identified. The campaign ran at a national level, although there was more success in big cities and less success in less densely populated areas and those with a small number of offices.

OPERATIONS

Recupel collects WEEE for free from companies and public institutions and organizations through an online platform. If more information is required than was inserted in the online form for the pick-up, it is requested via the phone. Recupel hires collectors who load the WEEE in boxes, cages, or pallets depending on the volumes to ensure that WEEE does not break in the collection boxes during loading or transport enabling more preparation for re-use. The WEEE goes to a transfer station, where re-use centres can select what they see apt for preparation for re-use. Remaining devices are transferred to a recycling or treatment facility.

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REWARD INCENTIVES

INCENTIVE TYPES



Pick up service

FATE OF COLLECTED EQUIPMENT



Recycling



Preparation for re-use

TYPE OF COLLECTED EQUIPMENT



Small Household appliances



Small IT

CONSUMER GROUP



B2B

SCALABILITY: MEDIUM

REPLICABILITY: HIGH

NAME OF OPERATOR: RECUPEL

MAIN ACTORS: RECUPEL, SCHOOLS, OFFICES, PUBLIC INSTITUTIONS, LOGISTICS PROVIDER, MEDIA OUTLETS

ONGOING

WHY BEST PRACTICE?

Recupel currently coordinates 1,500 to 1,600 collections per year, suggesting that there is a need for B2B collection services and that B2B flows are not captured well enough through existing municipal and retail collection channels.

SUCCESS RATE AND KPIS

The pick-up service collects 360 tons of WEEE per year, which is only 0.3% of the total collection but represents an important stream of WEEE that would likely not be collected through other collection points at municipal waste yards and retailers. The appliances recovered through the pick-up program are, on average, of better quality and are handled better than appliances from municipal waste yards and retail, which increases their potential for preparation for re-use. Local re-use and repair centres have contracts with Recupel, and a third-party agreement is set up per transfer station. The re-use/repair centres can select devices for preparation for re-use and the rest is picked up from the transfer stations by treatment operators.

ENABLERS

Recupel took the operative responsibility by becoming a middleman between the actors requesting pick-up and transporters. Initially Recupel launched the project as a matchmaking platform between actors requesting pick-ups and transporters offering pick-ups but, due to low collection rates, Recupel took on more responsibility to increase collection rates. Requesting a pick-up through the platform is simple and does not require more than basic information on volume and type of WEEE, thereby increasing the convenience for commercial actors. Additionally, transporters are trained by Recupel to take care of safe handling and packaging of WEEE during the pick-up on-site, so companies do not have to package the

CHALLENGES

In general preparation for re-use is a challenge because WEEE at municipal and retail collection points is not handled well to ensure it does not break.

SCALABILITY

The initiative is scalable but success rate for collection may vary regionally depending on the density of existing commercial actors, offices, and schools. Therefore, a pick-up service might be more economically feasible in bigger cities than in rural areas.

REPLICABILITY

The replicability is assumed to be high, since the initiative uses elements of WEEE collection which are already available to most PROs or can be replicated without large efforts. It builds upon an online request form and uses logistics contractors who were already doing collection for the PRO at collection points such as municipal waste yards and retail. Regional clustering of collection points, like in Belgium, for pick-up has an impact on the initiative's replicability.

LESSONS LEARNED

The cost for logistic contractors (truck drivers) is higher compared to regular pick-up from collection points, due to longer time and greater work efforts at the point of collection for handling, packaging and loading of the WEEE volumes. This increased cost combined with smaller volumes and more pick-up locations led to greater costs compared to those at established collection points. However, these increased costs did not have a significant impact on the fees collected from producers due to the low volume collected.

Working closely with the transporters who package, load and unload the WEEE, as well as setting aside WEEE from pick-up for re-use centres, helps to increase the preparation for re-use rate.

LINKS

<https://www.recupel.be/en/>

Similar initiatives mapped

Exceed B2B (Erion, IT) (note: see report for further information on the Exceed initiative; due to unclear success rate, Exceed is not included in the present booklet)

SECURE BOX COLLECTION AND DATA DELETION (NO)



Source: Norsirk

DESCRIPTION

Secure box is an initiative from Norsirk offering the safe collection of PCs, tablets, laptops, memory sticks, cameras, phones etc. all over Norway. These devices are targeted as they are often forgotten about or left in drawers by the consumer. The devices are all in need of data deletion, which is done after the collection.

OPERATIONS

The boxes are set up in municipalities and at retail (electronic shops). The boxes are designed with a flexible metal plate beneath the inlet lid, which contributes to lower the fall and to avoid breaking of products, which would hinder preparation for re-use. A logistics company is contracted to collect the secure boxes. Once the boxes are full, retailers/municipalities send an e-mail to Norsirk who then place an order for collection and an order for shipping out a new empty box through an online booking service with the logistics company ("mybring"). The logistics company creates shipment documents/ labels automatically and sends them via email to the collection points. Norsirk cooperates with Oslo Produksjon og Tjenester and OsloKollega to sort the devices collected in the boxes. The aim of the sorting is to separate devices for re-use from devices for recycling. This sorting is done according to the instructions from Foxway, who further process the fraction for re-use (second sorting, software deletion, cleaning, etc.) before the devices are sold. The parts that are not suitable for re-use are sent to Stena recycling or other companies for recycling.

REWARD INCENTIVES

INCENTIVE TYPES



Bring points

FATE OF COLLECTED EQUIPMENT



Preparation for re-use



Recycling



Re-use

TYPE OF COLLECTED EQUIPMENT



Small IT

CONSUMER GROUP



B2B



B2C

SCALABILITY: MEDIUM

REPLICABILITY: MEDIUM

NAME OF OPERATOR: NORSIRK

MAIN ACTORS: NORSIRK,
RETAILERS, REFURBISHERS
AND PREPARING FOR RE-USE
ORGANISATIONS

01/2012- ONGOING

WHY BEST PRACTICE?

The targeted waste stream is WEEE that may otherwise not be collected and there is a strong emphasis on preparation for re-use.

SUCCESS RATE AND KPIS

Last year Norsirk collected 110,000 kg of WEEE with Secure Box. The re-use rate for the collected WEEE is high and even increasing. However, due to inflation and the increasing interest rate, Norsirk saw collection volumes falling this year.

ENABLERS

Norsirk tackles the issue of data deletion by using a certified system to delete data securely and offers certificates to customers. It cooperates with retailers, refurbishers, and re-use partners to ensure proper data deletion, preparation for re-use, refurbishment, and recycling. For example, the sorting for preparation for re-use is done according to instructions from the re-use partner Foxway that ensure that the sorting fits their needs and reflects the market need. Retailers are especially attractive customers as they have legal obligations according to the "Avfallforskriften" and must pay the environmental fee to secure the proper collection of devices. Norsirk does not pay citizens for devices but pays municipalities for collection and does not charge them for the leasing costs of the boxes. Norsirk promotes its service through TV and newsletters which has allowed collection rate increases by 5-10%.

CHALLENGES

Norsirk reported that they faced several challenges at the beginning of the initiative. Some challenges included placement of the secure boxes in areas with low foot traffic, leading to decreased collection rates, as well as wheels that needed to be replaced with stronger, more durable ones. There was initially also a challenge with the information package that was distributed by the municipalities and retail to consumers because it was not detailed enough. Another challenge is the fierce competition to attract retailers as clients.

SCALABILITY

A scale-up is desirable for plastic containers but should remain small for steel containers as they are costly.

REPLICABILITY

Norsirk believes that the "Secure Box" is replicable because it requires 'just' adding stickers to commercially available bins along with marketing. However, a system including 24/7 monitoring, a secured area etc. to avoid theft must be set up which is more challenging to set-up and requires cooperation with retail and municipalities.

LESSONS LEARNED

After trying several bin materials, plastic bins were chosen as they are easy to lock and move in and out of a guarded room within the municipal lots and retail spots. Additionally, the bins now have a lid that prevents stealing from the box. They are light and flexible enough to put them behind a service desk. Initially, the boxes had volumes of 660 and 1100 litres (equivalent to around 450 -500 kg). This, however, was too big for electronic shops therefore a 360 litres size was introduced as an alternative. Norsirk has experienced that after a new TV spot or a newsletter article from them, the collection rate increases by 5-10% and then drops again.

LINKS

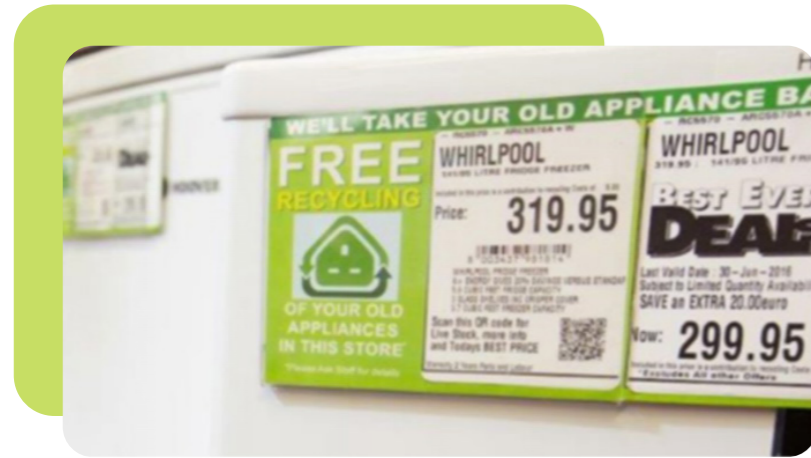
<https://norsirk.no/>

Similar initiatives mapped

ZEOS containers

Erion Renew (IT) (note: see report for further information on the Renew initiative; due to unclear success rate, Renew is not included in the present booklet)

RETAIL COLLECTION AND VISIBLE FEE (IE)



<https://www.weeeireland.ie/weee-annual-environmental-report-2022/>

DESCRIPTION

More than 50% of WEEE Ireland's take-back tonnage is directly attributed to retailer take-back programs. Efforts are being made to diversify the collection portfolio from these streams, focusing on advancing small WEEE and screens through close collaboration with retail and a shift from obligation to customer service.

OPERATIONS

WEEE Ireland collaborates closely with retailers to set up collection points and to help them meet their legal obligations (incl. communication) which are stringent in Ireland. For products like white goods, screens, and lighting, where a visible fee is applicable, information about the take-back service is provided to the consumer alongside the visible fee on the purchasing receipt. To promote take-back services and increase general awareness, WEEE Ireland and retailers have established a joint marketing fund, which they utilize for advertising and promotional activities. Furthermore retail is paid for the collected volumes of WEEE based on tonnage collected. The amounts collected from retail are directed to recycling facilities. Currently, WEEE Ireland do not separate used EEE for re-use or WEEE for preparation for re-use.

REWARD INCENTIVES

REWARD INCENTIVES

INCENTIVE TYPES



Bring points



Visible fee

FATE OF COLLECTED EQUIPMENT



Recycling

TYPE OF COLLECTED EQUIPMENT



Small IT



Small Household appliances

CONSUMER GROUP



B2C

SCALABILITY: LOW

REPLICABILITY: MEDIUM

NAME OF OPERATOR: WEEE IRELAND

MAIN ACTORS: WEEE IRELAND,
RETAILERS

07/2014-ONGOING

WHY BEST PRACTICE?

The initiative to involve retail strongly in the take-back of WEEE has resolved the issues of historical WEEE legacy to manage, and the lack of municipal waste yards per capita through providing collection points, and information on take-back services in retail.

SUCCESS RATE AND KPIS

More than 50% of WEEE Ireland's take-back tonnage is attributed to retailer take-back programs.

ENABLERS

The collection system in Ireland is successful because of a combination of "Like for like" take back (take back of one waste equipment for one newly purchased equipment of equivalent type in retail), the take back on delivery offered by retail, the mandatory handover of WEEE from retail to PROs, the communication and awareness work of the PROs, and the visible fee. The visible fee connects consumers, retailers, and producers and funds the service. The two Irish PROs, ERP and WEEE Ireland, collaborate to deliver the service. Retailers have shown a higher level of commitment after realizing that providing take-back services not only fulfils regulatory requirements but also enhances their customer service, which is valued by their customers. Retailers also benefit from a central marketing payment and contributions towards costs from the visible fee. Therefore, retailers improve their customer service and awareness by advertising the take-back message. their customer service and awareness by advertising the take-back message.

CHALLENGES

Distance sellers and delivery provided by third party couriers are a challenge for the financial feasibility of the take-back on delivery from retail since remuneration is paid on a per item basis instead of a per trip or day basis to the logistics providers. The retailers support the financing of their take back logistics from the contribution received from the PRO schemes and sometimes the figures do not add up for small appliances weighing less than a few kg. Logistics for collecting small WEEE in retail has also been challenging to set up. Currently WEEE Ireland provides receptacles for small WEEE and cages at the back of retailers' facilities and they are also developing additional shop floor receptacles as a supplement.

SCALABILITY

The initiative's scalability is assumed to be low since major retail players are already on-board for providing WEEE take-back as a service to their customers. The visible fee might be extended to include small WEEE (IT and small equipment) to increase awareness among customers.

REPLICABILITY

The replicability is assumed to be medium, since the initiative is based on strong cooperation between actors and a legally mandatory visible fee which serves as unifying element between retail, PROs, and customers. Introduction of visible fees on a national level is possible in theory but might be difficult to realize in the short or medium term. Additionally, due to Ireland's smaller marketplace in comparison to other EU MS, WEEE Ireland are closer to decision makers and to authorities.

LESSONS LEARNED

Protests from customers were expected when the visible fees were initially introduced although legally the visible fee is not defined as an additional charge or levy to consumers. However, this was not the case and was largely well received and positively evaluated by customers.

LINKS

<https://www.weeeireland.ie/>

KRINGLOOPWINKEL BRING POINTS (NL)



<https://www.stichting-open.org/en/ik-ben/recycling-company/>



Source: Stichting OPEN

DESCRIPTION

Thrift stores hand over non-resalable EEE to Stichting OPEN for recycling after a certain time period it has been in the stores. Stichting OPEN picks-up the WEEE free upon request from the thrift stores.

OPERATIONS

Thrift stores (in dutch "Kringloopwinkels") receive used EEE as donations and after checking basic functionality put them in the shop. Donated appliances that are not resalable because of their condition, and appliances that are not sold after a certain time (approximately 3 weeks) are handed over to Stichting OPEN for recycling. 300-400 thrift stores have a contract with Stichting OPEN. The collection through Stichting OPEN is free and thrift stores receive the same fee as retailers for operating as collection point for WEEE. A maximum of 5% is preparation for re-use. A lot of equipment is not fit preparation for re-use because it is outdated, has a high energy requirement, etc.

REWARD INCENTIVES

INCENTIVE TYPES



Bring points



EEE donation
(charity)

FATE OF COLLECTED EQUIPMENT



Preparation
for re-use



Recycling

TYPE OF COLLECTED EQUIPMENT



Small IT



Small Household
appliances

CONSUMER GROUP



B2B

 **SCALABILITY:** MEDIUM

 **REPLICABILITY:** HIGH

NAME OF OPERATOR: STICHTING OPEN

MAIN ACTORS: STICHTING OPEN,
THRIFT SHOPS

ONGOING

WHY BEST PRACTICE?

The initiative increases overall collection rates of WEEE, as thrift stores have a double function as resale points and waste collection points after testing whether the used appliances can be re-sold.

SUCCESS RATE AND KPIS

The thrift stores annually collect 0.6-0.7 kg WEEE per capita and hand over 7,000-8,000 tons of WEEE per year to Stichting OPEN.

ENABLERS

The existence of thrift shops and their acceptance by the population is a key enabler for this initiative. Additionally, the provision of fees to the shops for the collection and handling of WEEE allows for close cooperation with them.

CHALLENGES

Stichting Open is in charge of collection points that StiBat (PRO for batteries) has set up, which adds more collection points and complexity to their system. They are looking for ways to optimize the efficiency and cost-effectiveness of these points. Stichting Open is also exploring how to handle the new challenge of electronic vapes, which are a growing waste stream. They are considering whether setting up collection points at over 2,000 tobacco and e-cigarette stores is feasible and cost-efficient. Moreover, Stichting Open highlights that the modalities of waste collection are organized at a municipal level and not at a district level in the Netherlands. This leads to a variety of practices and policies, such as the Pay-as-you-throw principle, which is implemented in some municipalities and affects the performance of different initiatives across the country.

SCALABILITY

Scalability for this initiative is considered to be medium and depends on wider outreach of thrift stores and the possibility to return functional but used EEE as well as WEEE at their locations. The option of including preparation for re-use activities directly at the thrift stores is difficult due to the personnel trainings required and the need to adhere to technical standards for repair activities.

REPLICABILITY

The initiative is considered to be replicable in all cases where networks of thrift stores exist.

LESSONS LEARNED

About 50% of the total small used EEE donated to thrift stores returns to Stichting OPEN as WEEE. The thrift stores do not repair because they do not have the knowledge or training to do this.

If preparation for re-use is to be increased, there needs to be a safety check e.g., using CENELEC standards for preparation for re-use. They could give permits to companies to do such quality checks centrally and allow only those companies to do it in a safe manner. This is however opposed to the idea of local repair shop/social inclusion initiatives as they currently exist.

LINKS

<https://www.stichting-open.org/en/>

TROLLEY BRING POINTS (MT)



<https://www.stichting-open.org/en/ik-ben/recycling-company/>

DESCRIPTION

WEEE trolleys are metal grid boxes on wheels in which citizens can dispose of their small WEEE free of charge. WEEE Malta has purchased around 200 trolleys and installed them in Malta and Gozo. The trolleys are located in and around local councils, townhalls, schools and companies with more than 80 employees.

OPERATIONS

The trolleys are placed by WEEE Malta around local councils, townhalls, schools, and companies employing more than 80 people. Three collection companies are contracted for the emptying of the trolleys. The WEEE collected in the trolleys is transferred to a contracted recycler who sorts the devices and partially dismantles them. These fractions are then exported out of Malta for further treatment.

The trolleys have an acquisition cost of 510 EUR each. Additionally, each emptying and the recycling of the collected small WEEE is a cost factor.

REWARD INCENTIVES

INCENTIVE TYPES



Bring points

FATE OF COLLECTED EQUIPMENT



Recycling

TYPE OF COLLECTED EQUIPMENT



Small IT



Small Household appliances

CONSUMER GROUP



B2C

 **SCALABILITY:** LOW

 **REPLICABILITY:** HIGH

NAME OF OPERATOR: WEEE MALTA

MAIN ACTORS: WEEE MALTA,
LOCAL COUNCILS, SCHOOLS,
RETAIL, LOGISTICS CONTRACTORS

2017 - ONGOING

WHY BEST PRACTICE?

Since the collection obligations are imposed on local authorities in Malta, WEEE Malta made use of the local councils to install a dense net of WEEE trolleys. The focus was on collection of small WEEE, as a separate initiative for collection of bulky WEEE together with other bulky waste exists on the island.

Although there are some locations, like schools, where there is comparably little e-waste collected, the trolleys help raise awareness and teach children about WEEE.

SUCCESS RATE AND KPIS

Between 2017 and 2023, more than 1 million small WEEE items were collected with the WEEE trolley campaign, summing up to 40-50 tons of small WEEE per year and roughly 1 ton of collected small WEEE per week in Malta.

ENABLERS

The dense net of bring points makes it convenient for consumers to dispose of their small WEEE in local council buildings, schools and companies. The system is enabled by successful collaboration with local councils, and collection companies who empty the trolleys regularly. Items that can be disposed of in the trolley are clearly depicted. Only small WEEE should be placed in the trolley whereas batteries and lamps are excluded. Batteries can be put in a separate box nearby that is provided by another PRO. To promote the trolleys, WEEE Malta conducts educational campaigns in schools and teaches pupils from grade 4 on how to properly dispose of WEEE.

CHALLENGES

Due to the open nature of the WEEE trolley (no lid on it), a certain percentage of the devices become target of theft and misuse. For trolleys which are openly accessible and not placed inside of offices or waste yards, bottles and other misthrows are common.

The lack of contractual agreement between WEEE Malta and local councils is sometimes a challenge, since commitment to the project is potentially subject to changes during election periods and dependent on elected officials. Moreover, WEEE Malta always provides literature and infographics that the councils can share on their social media channels but not all local councils do so.

SCALABILITY

The initiative can scale, but 44 out of 68 councils are already in it. Some councils simply lack space for placing a trolley.

REPLICABILITY

When setting up the trolley system WEEE Malta learned from Recupel (Belgium) and WEEE Ireland who have similar bring points in place proving that the system is replicable.

LESSONS LEARNED

Theft and misuse can hinder proper collection but can be mitigated by choosing enclosed locations for collection points such as local council buildings. Marketing is very important and councils should be taken on board to participate and to share educational content through relevant channels.

LINKS

<https://www.weemalta.org/>

Similar initiatives mapped

ZEOS containers (SI)

Erion Renew (IT) (note: see report for further information on the Renew initiative; due to unclear success rate, Renew is not included in the present booklet)

DEPOT CONTAINER BRING POINTS (SI)



<https://www.zeos.si/en/Equipment-for-the-collection-of-waste-and-used-products/>

DESCRIPTION

ZEOS has set up street collection containers for small WEEE all over Slovenia, co-funded by the EU Commission and the Ministry of the Environment and Spatial Planning of the Republic of Slovenia. Additionally, local advertising and marketing in the area are increased if the collection rate in a municipality is lower than expected.

OPERATIONS

The containers are typically emptied once every three months. The collected WEEE are then transferred to a recycler in Slovenia, who oversees any sorting, which is done manually. ZEOS uses extrapolated historical data of the collection containers and filling speed to draw conclusions about the necessary collection rhythm at a given location and uses this information to optimise collection routes. The collected small WEEE is directed to recycling facilities.

REWARD INCENTIVES REWARD INCENTIVES

INCENTIVE TYPES



Bring points

FATE OF COLLECTED EQUIPMENT



Recycling

TYPE OF COLLECTED EQUIPMENT



Small IT



Small Household appliances

CONSUMER GROUP



B2C

SCALABILITY: MEDIUM-HIGH

REPLICABILITY: HIGH

NAME OF OPERATOR: ZEOS

MAIN ACTORS: ZEOS,
MUNICIPALITIES, PUBLIC SERVICE
PROVIDERS

2016 - ONGOING

WHY BEST PRACTICE?

The initiative is considered best practice because the street containers contributed to an increase of collected small WEEE. However, since in recent years the general amount of small WEEE generated in Slovenia has increased, it is difficult to know whether the waste disposed in street containers would have otherwise been dropped off at other collection points or whether the containers facilitate small WEEE collection that otherwise would have not happened.

SUCCESS RATE AND KPIS

Overall, the street collection bins make up about 10% of the total amount of small WEEE and batteries collected annually (3,500 tons total of small WEEE). In the last years, the network of street bins was expanded from 450 containers in 2017 to 800 containers in 2023. With that, the collection through the street collection bins has increased rapidly: 20 tons were collected in 2016, 80 tons in 2017, 280 tons in 2018, 320 tons in 2019 and 380 tons in 2020. Nowadays, an average of 350 tons are collected per year. The collection rate varies per region. For example, with 140-200 kg collected per container, the coastal and mountainous regions are performing better than other regions (100-130 kg). The difference in collection rate by region could be due to greater tourism and/or awareness.

ENABLERS

An enabling factor is the ease of disposal of small WEEE and batteries for private households. It is especially convenient for consumers if the containers are placed on existing "eco-islands" where there are also collection containers for other waste streams (e.g., textiles). Through a survey, ZEOS found that the collection rate was highest when the containers were placed near containers for used textiles. ZEOS works directly with municipalities and public service providers to find locations for its collection containers. For marketing purposes, ZEOS connects with local utility companies, as it turned out that local advertisement is more successful. The street containers have a catchy design with instructions and collected items shown as stickers on the outside, which acts as its own advertising. ZEOS owns transport vehicles, which they consider particularly important as it means they can take care of collection and transport themselves.

CHALLENGES

At eco-islands, sometimes waste other than WEEE is thrown into the WEEE containers when the corresponding other containers (e.g., textiles) are full. Occasionally small WEEE are also stolen from the street collection bin.

SCALABILITY

According to ZEOS, the initiative is scalable, and they are working on expanding their network.

REPLICABILITY

The initiative is replicable, as shown by the fact that ZEOS was inspired by an initiative in Czechia. ZEOS is also setting up street containers in Bosnia and Herzegovina. A PRO in Greece is also testing similar street containers.

LESSONS LEARNED

The size of the bins was determined by trial and error and now measure 1.2 x 1.2 x 1.8 m or 2.59 m³. The bins must be large to avoid emptying too frequently. Today, the collection takes place approximately every 3 months. It was also found out, that street containers near stores work less good as these sites are often owned by the stores which have demanded payment for placement. In addition, most stores already have their own collection sites and do not want more outside their doors. ZEOS also used to install mobile collection containers in front of schools, which were combined with the collection of hazardous waste from households. However, it turned out, that these campaigns are not as effective as street containers.

LINKS

<https://www.zeos.si/en/>

Similar initiatives mapped

Trolley bring points (MT)

Erion Renew (IT) (note: see report for further information on the Renew initiative; due to unclear success rate, Renew is not included in the present booklet)

