



WEEE: SAP Recycling Administration

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Session ID: 82764

About the Speakers

Vedant Borse

- Solution Director, HCL
- SAP S/4 Hana Practice Head, SAP Innovator, Author, Trainer and Speaker
- Fun Fact

Sendil Perumal

- IT architect, Agilent
- SCM Solution Design

Agenda

- WEEE Directive for 2018/19 and its impacts
- SAP REA (Recycling Administration)
- Approach to Meeting deadlines

WEEE Directive

- As of August 2018, or January 2019 (depending on the country), electrical and electronic products that are subject to the WEEE Directive 2012/19/EU, must also be reported in European countries
- Challenges for producers who also sell electrical and electronic equipment in European countries
 - Assigning their products to the correct categories
 - Reporting them to the compliance schemes



WEEE new scope in 2018/19: what consequences?



- From 15 August 2018 the scope previously described by the 10 WEEE categories will be extended to a so-called open scope (Article 2, Para. 1b Directive 2012/19/EU). The **WEEE directive** changes its method of determining the products covered from a closed, defined scope to an '**open scope**'.
- The legislation clearly states that, apart from some exemptions (Article 2, Para. 3 Directive 2012/19/EU), the WEEE Directive shall apply to ALL EEE
- 10 WEEE categories will be replaced by the 6 new categories listed in Annex III WEEE Directive
- Alignment towards new price lists as well as new declaration categories and subcategories

What are the new categories coming into use on August 15th 2018?

1. Heat exchange equipment
 2. Screens, monitors, and equipment containing screens having a surface area greater than 100cm²
 3. Lamps
 4. Large equipment (any external dimension greater than 50 cm)
 5. Small equipment (no external dimension greater than 50 cm)
 6. Small IT and telecommunications equipment (no external dimension greater than 50 cm)
- Deadlines: Some countries in 2018, some in 2019



Latest Updates



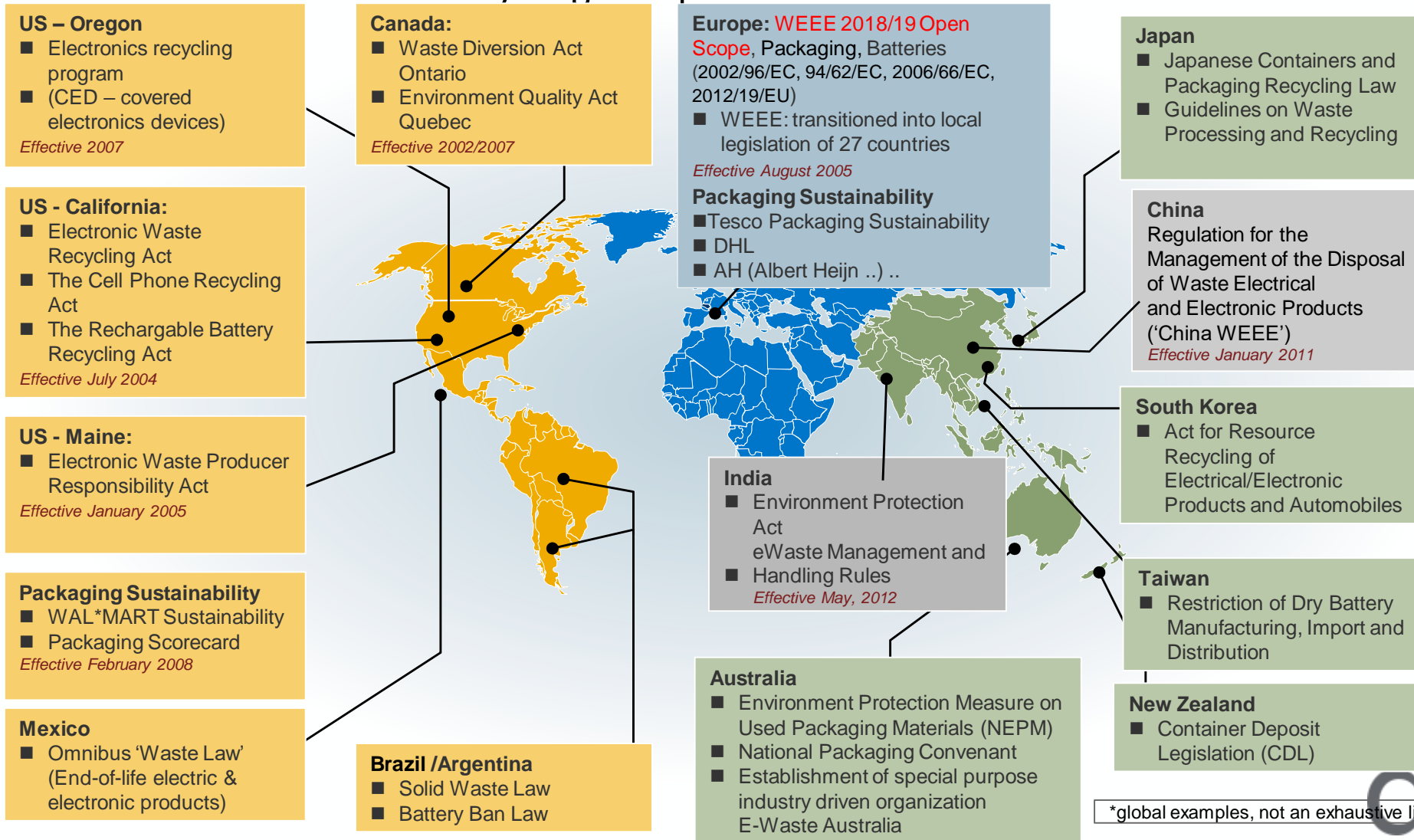
- Commission Implementing Regulation (EU) 2019/290 of 19 February 2019 establishing the format for registration and reporting of producers of electrical and electronic equipment
- Directive:
 - A harmonized data structure and format for the registration and reporting of producers of electrical and electronic equipment (EEE)
 - Should be used by all producers, including producers supplying EEE by means of distance communication or, where appointed, by authorized representatives,

http://data.europa.eu/eli/reg_impl/2019/290/oj

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Recycling Regulations Spreading Globally*

- Almost All Markets demand Recycling Compliance



*global examples, not an exhaustive list



Agilent Technologies

\$4.2 B



- Bio-analytical and electronic measurement solutions to the life sciences, chemical analysis, communications and electronics, diagnostics and genomics industries
- Agilent Technologies embarked on a journey long ago for being a globally compliant organization much before any regulation is in effect (GHS Label, PRC, RAR, WEEE, etc)
- New Directive impacted product sales and reporting in EU region

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HCL Technologies

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- Delivers innovative technology solutions built around Digital, IoT, Cloud, Automation, Cybersecurity, Analytics, Infrastructure Management and Engineering
- Strategic Consulting Partner for Agilent for over a decade



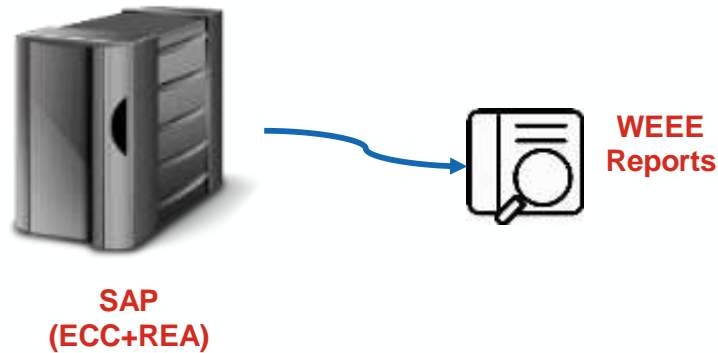
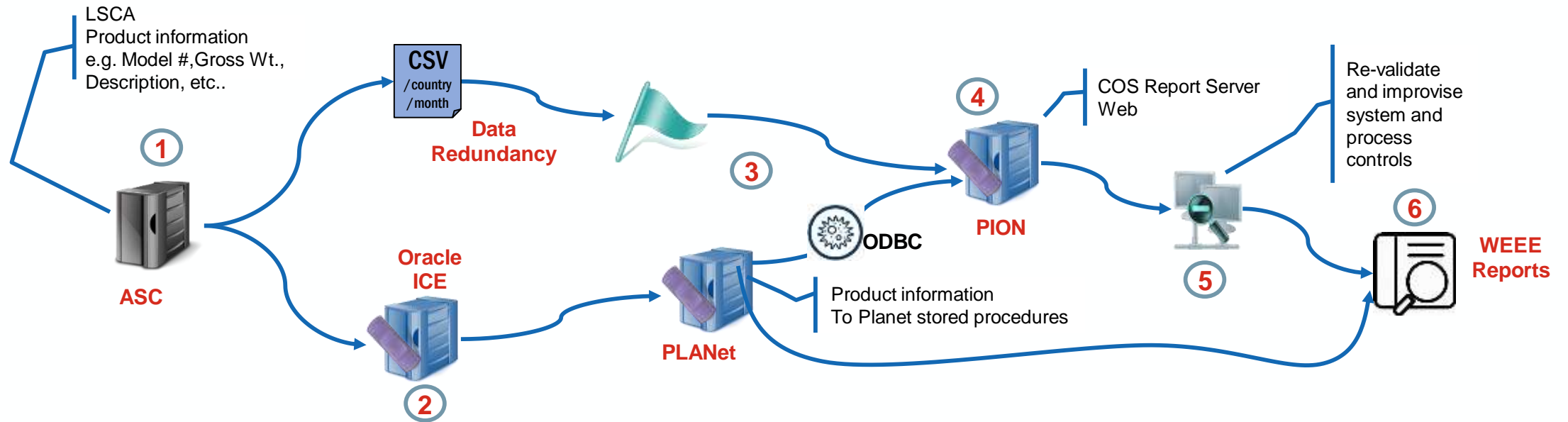
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Project Objective

EU Electronic Waste Project

- Enable Agilent to be compliant with the new EU WEEE directive
- Classification of EEE according to WEEE Regulation
- WEEE reporting infrastructure compliant to new reporting format and also old format
- Build Integrated SAP environment to streamlines process and data redundancy across multiple platforms

Integrated Process and Systems

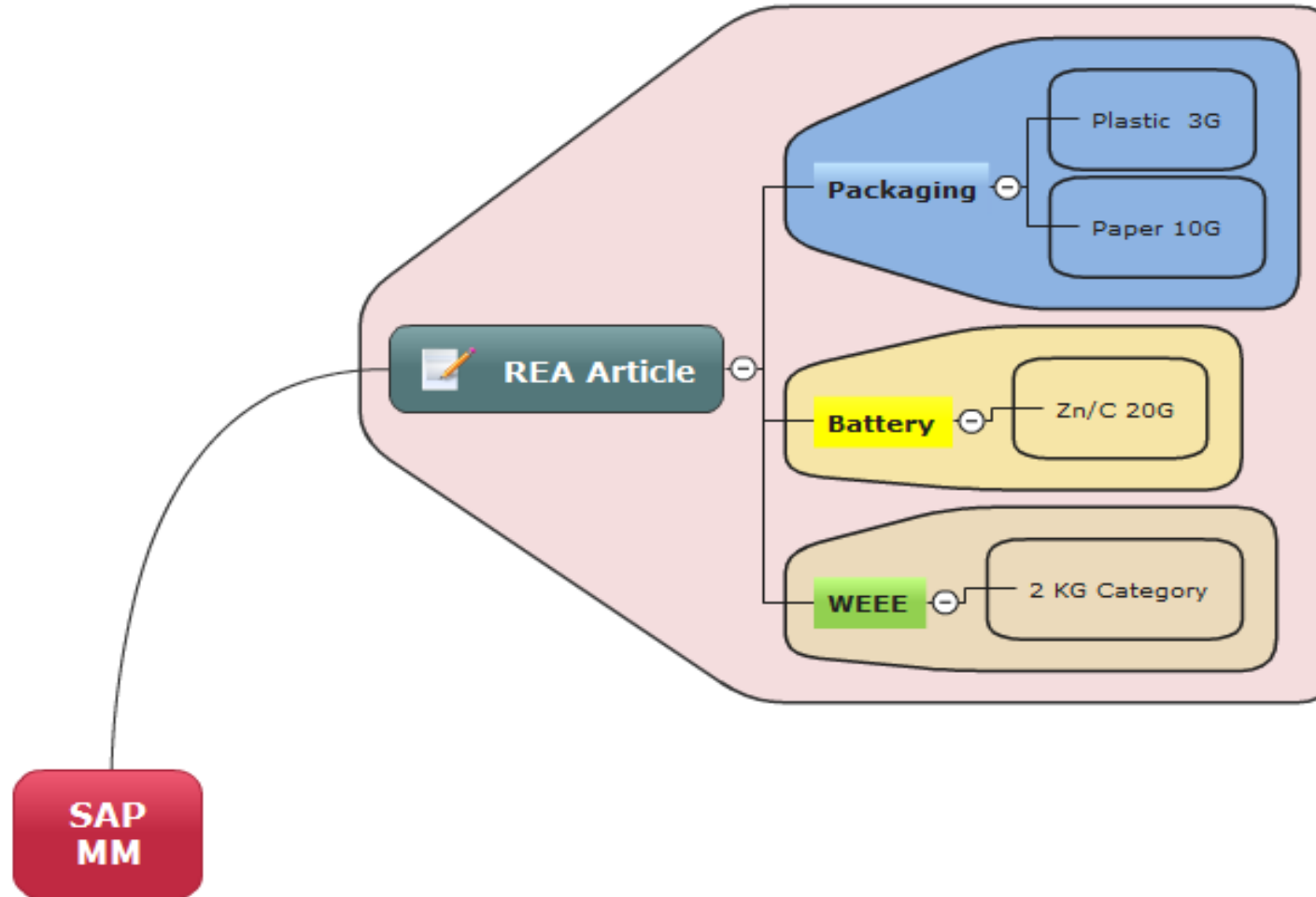


What is REA (Recycling Administration)?



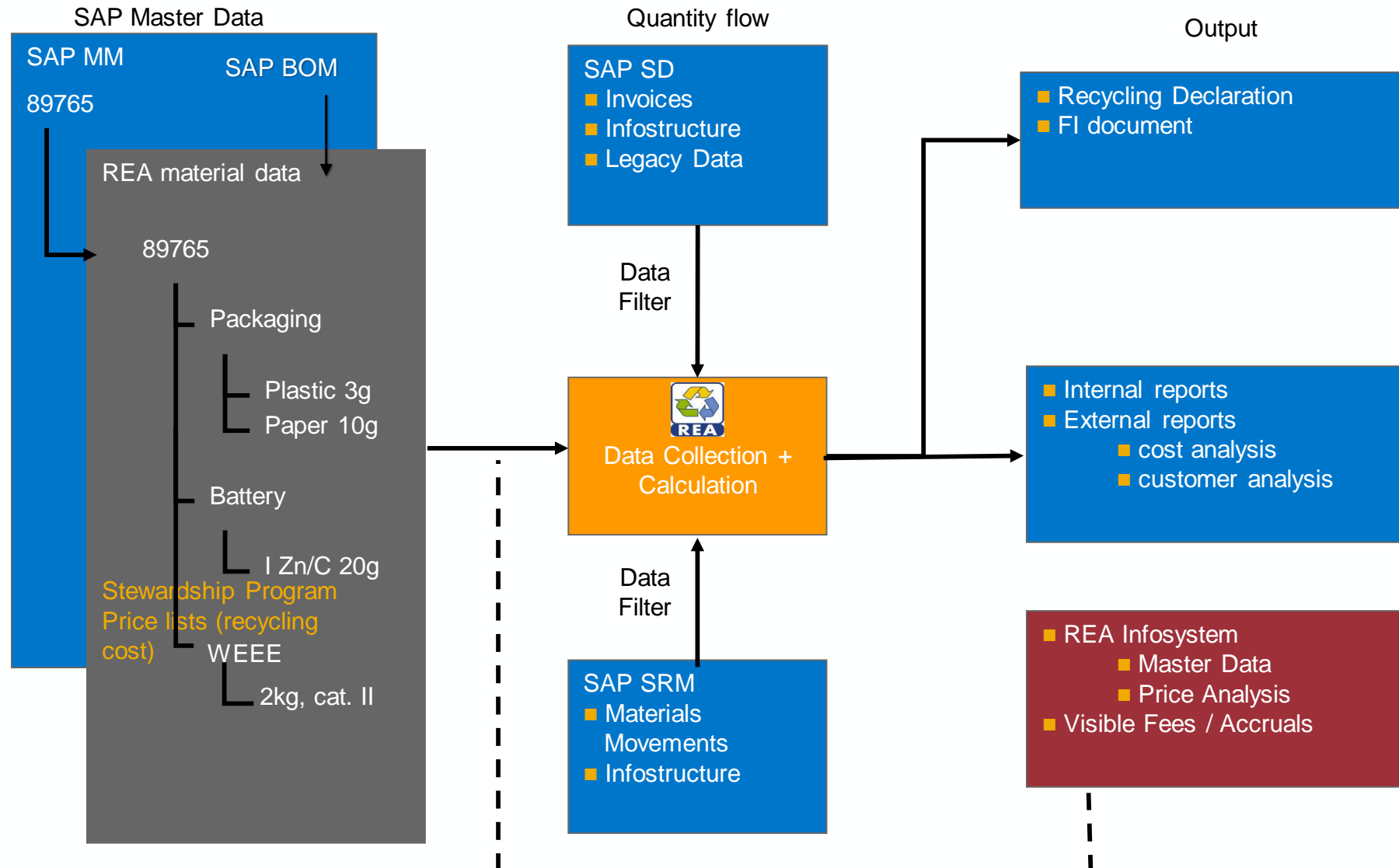
- REA is a scalable software package from SAP
- Enables companies to create and manage a global platform for recycling administration and reporting
- Supports all European directives related to waste electrical and electronic equipment (WEEE), packaging and batteries

Simplified REA Master Data



SAP REA leverages CORE SAP ERP functionality

for all Recycling Management Process Steps



Support for Multi-Materials Recycling Compliance



SAP Easy Access Recycling Administration

Change REA Recycling Partners: Initial Screen

Export Import

- CTry
 - AT
 - BE
 - CA
 - DE
 - JP
 - NO
 - US

Re. Partner

R.S.	Partner	Re. Partner No.	Name 1	Con.
	ARA	1000081	Altstoff Recycling Austria	
	ERA	1000082	ERA Elektro Recycling Austria GmbH	

Change REA Packaging: Fraction Composition Material

Partner Fractions Price Calculation Dimensions Versions

Packaging P1668 Class V Sales Packaging

Validity Period for Fraction Assignment

Valid From 05/18/2018 To 12/31/9999 Version 000001

Fraction Assgmt	Text	Weight	WeightUnit	Re.Partner	Country
100	Pap...	1	G	ISD	DE
00001	Pap...				

Available Fractions	Text	Re.Partner
300	Plastic	
301	Plast... ISD	
302	EPS	
303	EPS ... ISD	
304	PVC	
305	Plast... ISD	
306	Alu...	
307	Alu... ISD	

REA Recycling Partner: Display Fractions (Packstoffe)

Short Texts General Control Company Codes

Re.Partner ARA Country AT Vendor: Altstoff Recycling Austria Customer: ERA Elektro Recycling Austria GmbH

Recycling-Partner Fractions

Fraction	Description	WU	Fract. Price	Assigned M
1.1.	Sales packaging - Paper	KG		
1.2.	Transport packaging - Paper	KG		
1010	Papier Haushalt	KG		
1020	Glas Haushalt	KG		
1031	Eisenmetal Haushalt	KG		
1032	Aluminium Haushalt	KG		
1041	Kunststoff Haushalt	KG		
1042	Getränkeverbundkarton Haushalt	KG		
1043	Sonstige Materialverbunde Haushalt	KG		

Display REA Price List: Item

Re.Part. ARA Company Code 0001 Ctry AT Version 0001

Valid From 01/01/2011 To 12/31/2014 Tax Ind. 0 Discount in % 0

Part.Crcy EUR Ccd.Crcy EUR Alt.Crcy EUR Disc.Items Addit.

C	VolAC	PFract	SpCo	Price	Part. Crcy	Per	Un	Dis%	Price	CoCode	Crcy	Price
M	1.1.	0		1.05	10 KG			0.000	1.05			1.05
M	1.2.	0		0.42	10 KG			0.000	0.42			0.42
M	1010	0		0.95	10 KG			1.000	0.00			0.00
M	1010	401		0.95	10 KG			1.000	0.00			0.00
M	1010	404		0.95	10 KG			100.000	0.00			0.00
M	1020	0		0.82	10 KG			0.000	0.00			0.00
M	1020	401		0.82	10 KG			0.000	0.00			0.00

Centrally manage variations of global Recycling Schemes for multi-materials per product category calculate related fees per individual material price

Automated Declarations for multiple Schemes



St. Code Level	St. Name	Part	Fraction Weight (%)	St. Partner Price	Net Value	Unit
11	Other Microproducts	0	0	0,00	0,00	0,00
12	Refrigerator & fridge	0	0	12,70	0,00	0,00
21	Small & medium-size appliance	0	0	0,00	0,00	0,00
22	Home Appliances: Cooks	0	0	0,00	0,00	0,00
31	IT: Nelson: MP	0	0	0,04	0,00	0,00
32	IT: Nelson: Computer	15	15	0,04	0,43	0,00

Display REA Document

Part	Fract	Partner	Fraction	Short Text	Weight	WeightUnit	Price	Unit	Unit
10				Glass - Clear (fint) glass	0,000000		0,000	0	
20				Metal - Aerosol containers	0,000000		0,000	0	
22				Metal - Other steel and metal containers	0,000000		0,000	0	
30				Paper - Gable top containers	0,000000		0,000	0	
31				Paper - Aseptic containers	0,000000		0,000	0	
32				Paper - Paper laminants	0,440000	KG	135,080	10	
33				Paper - Corrugated cardboard	1,100000	KG	80,200	10	
34				Paper - Boxboard and other paper packagi	4,840000	KG	43,440	10	
40				Plastic - PET bottles	0,000000		0,000	0	
410				Plastic - PET bottles > 5 Litres	0,000000		0,000	0	
420				Plastic - HDPE bottles and jugs	0,000000		0,000	0	
430				Plastic - HDPE bottles and jugs > 5 L	0,000000		0,000	0	
440				Plastic - Polystyrene	0,000000		0,000	0	
450				Plastic - Other rigid plastics	1,320000	KG	135,080	10	
460				Plastic - Other rigid plastics > 5L	0,000000		0,000	0	0,000 CAD
470				Plastic - LDPE/HDPE film	0,000000		0,000	0	0,000 CAD
480				Plastic - LDPE/HDPE film carry out bags	0,000000		0,000	0	0,000 CAD
490				Plastics - Laminants	0,000000		0,000	0	0,000 CAD
491				Plastic - Biodegradable plastic film	0,000000		0,000	0	0,000 CAD
492				Plastic - Biodegradable rigid plastic co	0,000000		0,000	0	0,000 CAD
493				Plastic - Natural and Synthetic Textiles	0,000000		0,000	0	0,000 CAD
60				Printed Materials - Newsprint CNA/OCHA	0,000000		0,000	0	0,000 CAD
64				Printed Materials - Other Printed Materi	0,000000		0,000	0	0,000 CAD

Material	Total weight	in	per	Rate in	Abatement	Gross amount in
				EUR	in %	EUR
Alu	0	TO	1	33,00	0,00	0,00
Paper/Paper/Card	3,387000	TO	1	111,00	0,00	375,24
Metal/Steel	0	TO	1	111,00	0,00	0,00
Aluminium	0	TO	1	111,00	0,00	0,00
Verpackungsmittel	0	TO	1	111,00	0,00	0,00
Strapazierstoffe	0	TO	1	470,00	0,00	0,00
Stromkabel	0	TO	1	890,00	0,00	0,00
Verschleissstoffe	0	TO	1	345,00	0,00	0,00

Back total of weight per in EUR: 381,24

Product Line	EU Design	Product Weight (in Packaging)	Obsolescence Date
29		28500 g	17-FEB-2012

Material	Weight	Volume	Component
Paper / Cardboard	2177.67 g	150000.00 cm ³	-
Polyethylene	55 g	-	-
Polypropylene	1030 g	38350.00 cm ³	-

Quantity	Description	Installation
1	1420-0338, Panasonic BR2/3AE2P	Installed (not removable)

Chemistry	Hazardous Subst	Label correct	Rechargeable	Voltage	Capacity
Li	NO	YES	NO	3.0 V	1.2 Ah

Form Factor	Weight	Height	Diameter
Single Battery	14 g	34 mm	17 mm

Product material composition

Product substance data:
None indicates the substance is not intentionally added or knowingly present

**California
Electronic Waste
Recycling Act CED**

Item	Gesamtmenge in kg	Teile in kg	Lieferumfang pro Partner in %	Stückzahl
1.1	0,170	0,10F	0,03	
1.2	0,000	0,000	0,00	
2.	0,000	0,000	0,00	
3.	0,000	0,000	0,00	
4.	0,000	0,000	0,00	
0.1	0,000	0,000	0,00	
0.2	0,000	0,000	0,00	
0.5	0,000	0,000	0,00	
0.	0,000	0,000	0,00	
7.0	0,190	0,620	0,11	
7.1	0,900	0,160	0,14	
8.	0,010	0,670	0,01	
9.1	0,000	0,000	0,00	
9.2	0,000	0,000	0,00	

**Declarations
Austria/Norway**

Benefits Achieved with SAP REA

- Single Integrated system to manage WEEE Declarations
- Master data management (fractions, price lists)
- Declaration generation
- Fee calculation & posting
- Extended Producer Responsibility (EPR) Regulations
 - EU Packaging Directive
 - EU Battery Directive
 - EU WEEE, WEEE recast
 - USA, Canada, Japan Packaging
 - China WEEE
- Packaging Scorecards from Supply Chain
 - Sustainable Packaging Scorecard
- flexibility to use REA master data for Weights and Dimensions

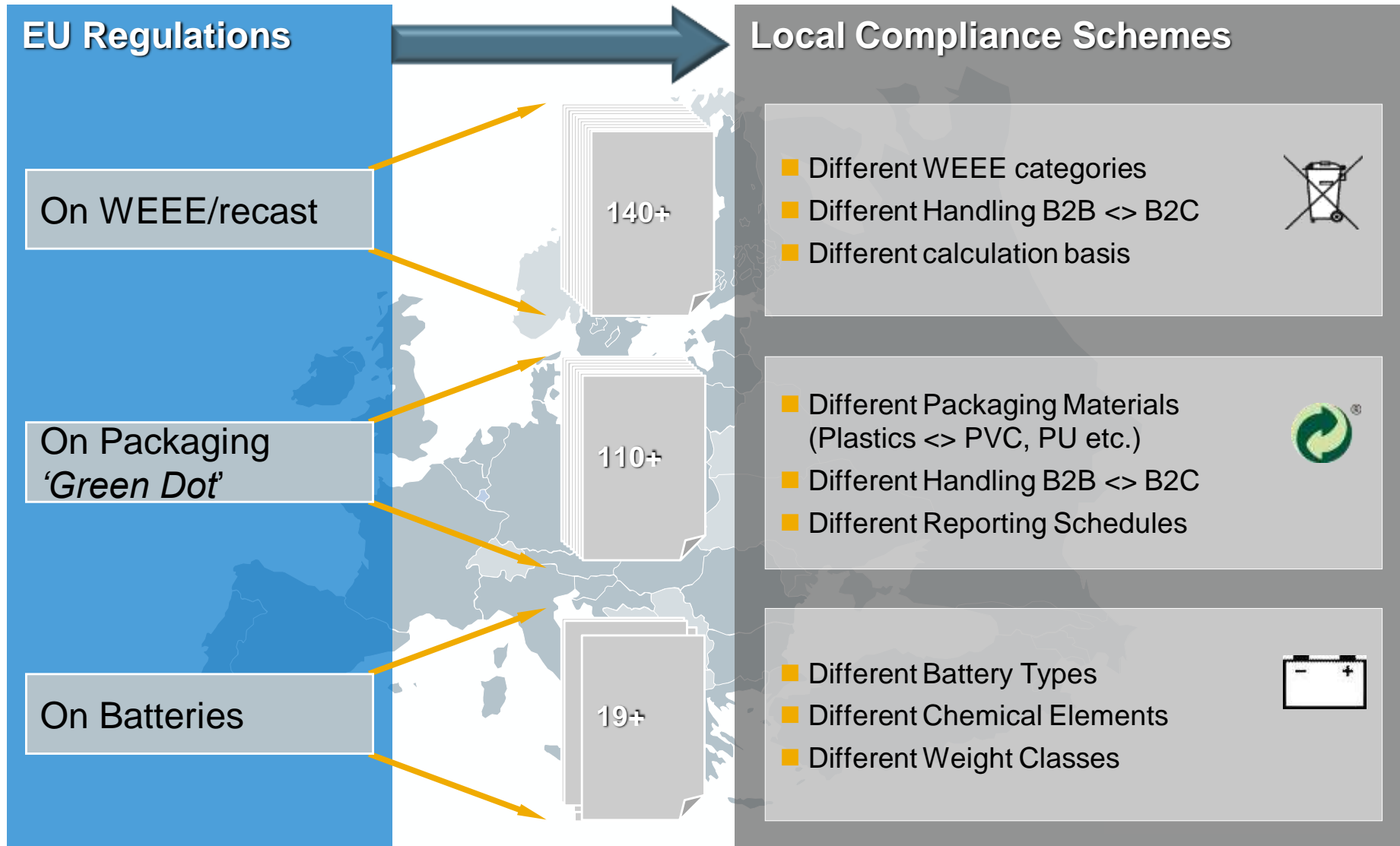


R.S.	R.S.	Con.	Partner	DS	A	MRP	RP	AF	Splitting	Trdlv.	Price / P. Cray
			CR_IT	1					0.0000	412	EUR
			EAR_DE	1					0.0000	4	EUR
			ECCASI	1					0.0000	48702	EUR
			ELKER	1					0.0000	6,400	EUR

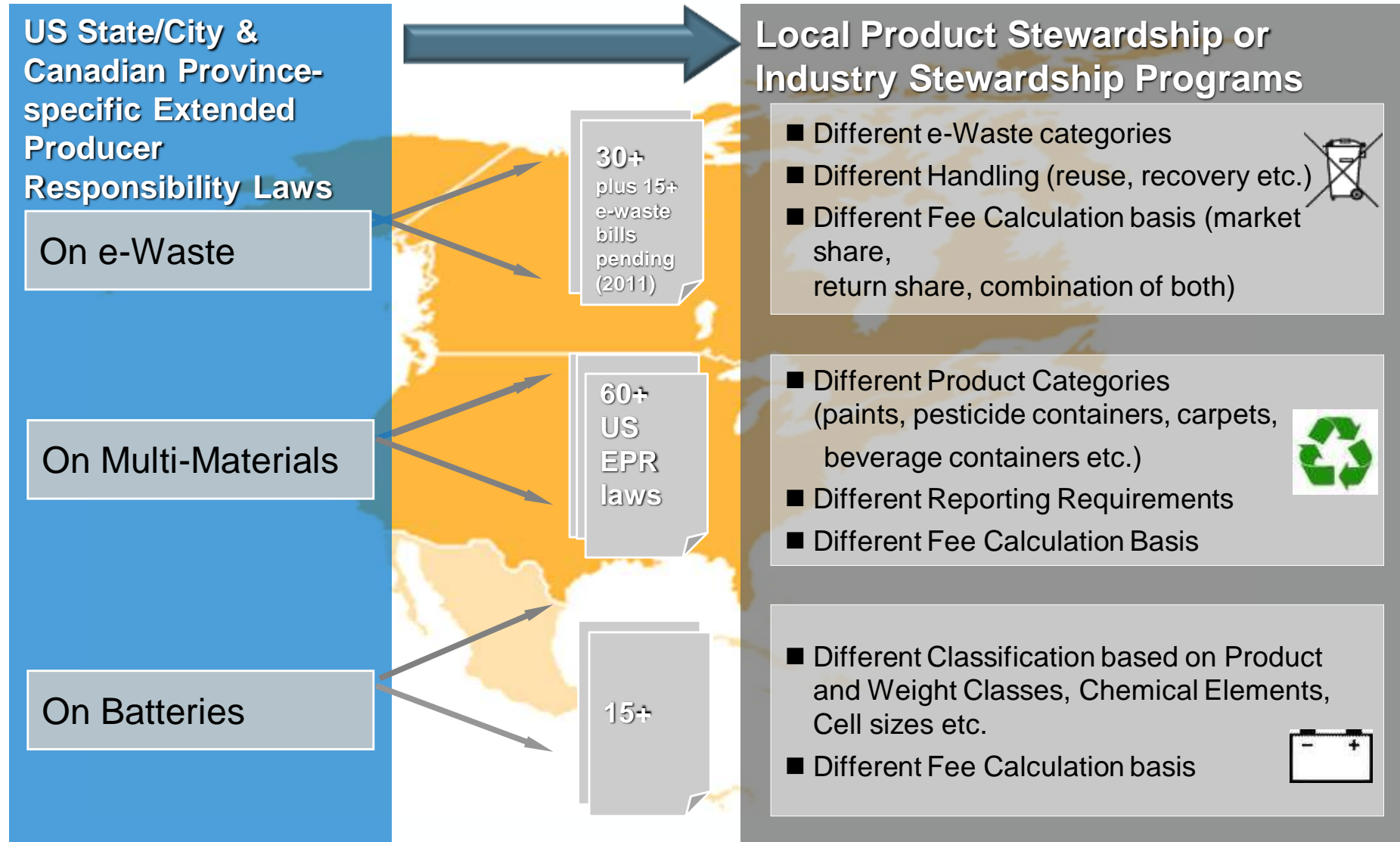
Fraction	Fraction Text	Fract
WEEE	WEEE	

Material	Material	Material	Material	Material	Material	Material
4	1.0	1.0	1.0	1.0	1.0	1.0
5	1.0	1.0	1.0	1.0	1.0	1.0
6	1.0	1.0	1.0	1.0	1.0	1.0
7	1.0	1.0	1.0	1.0	1.0	1.0
8	1.0	1.0	1.0	1.0	1.0	1.0
9	1.0	1.0	1.0	1.0	1.0	1.0
10	1.0	1.0	1.0	1.0	1.0	1.0
11	1.0	1.0	1.0	1.0	1.0	1.0
12	1.0	1.0	1.0	1.0	1.0	1.0
13	1.0	1.0	1.0	1.0	1.0	1.0
14	1.0	1.0	1.0	1.0	1.0	1.0
15	1.0	1.0	1.0	1.0	1.0	1.0
16	1.0	1.0	1.0	1.0	1.0	1.0
17	1.0	1.0	1.0	1.0	1.0	1.0
18	1.0	1.0	1.0	1.0	1.0	1.0
19	1.0	1.0	1.0	1.0	1.0	1.0
20	1.0	1.0	1.0	1.0	1.0	1.0

SAP REA addresses all EU Regulation



And other countries including NA



Q&A

THANK YOU FOR PARTICIPATING

Vedant Borse

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