

EPR Reporting Documentation

Circpack's Sweden EPR Report for NPA (2026 reporting)

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1. Introduction

Sweden's packaging Extended Producer Responsibility (EPR) system changed significantly on 1 January 2024, when the operational responsibility for collecting household packaging waste moved from producers to municipalities. However, producers remain fully financially responsible for the collection and recycling of all packaging waste, and must fund these costs through an approved packaging scheme. To meet these obligations, producers must join a Producer Responsibility Organisation (PRO). Sweden currently has two approved PROs for packaging, NPA is one of them.

Näringslivets Producentansvar (NPA) is a non-profit organisation owned by several material and industry associations. NPA was created to align with the new legislation and now manages producer reporting, invoicing, and financing of packaging waste handling.

Until the end of 2023, the national PRO was Förpacknings & Tidnings Insamlingen (FTI), which coordinated household packaging collection and sorting. FTI ceased operations following the 2024 reform, and its remaining functions were largely transferred to NPA and the municipal collection system.

2. Country Overview & EPR Background

In 2023, the full implementation of *Ordinance SFS 2022:1274* on Producer Responsibility for Packaging fundamentally restructured the collection responsibilities. This legislation replaced *SFS 2018:1462 and SFS 2005:220* (the deposit system ordinance). A key change is the transfer of operational responsibility for collecting packaging waste from PROs to municipalities (operational from January 2024), while producers retain full financial responsibility. Complementing this, Regulations *NFS 2022:11* (issued by the Swedish Environmental Protection Agency) provide the technical framework for calculating packaging fees. These fees are "eco-modulated," meaning they are differentiated based on the recyclability of the packaging material-penalising hard-to-recycle designs and incentivising circularity. Additional regulations, such as *NFS 2023:13*, further clarify reporting obligations to ensure transparency in the flow of packaging data between producers, PROs, and the Environmental Protection Agency (EPA).

3. What to Report & When

Companies that produce and import non hazardous products commercialised in packaging made of all types of materials, including paper, glass, plastic, ceramic, wood, textile, metals are required to be registered and submit reports to the Swedish Environmental Protection Agency (Naturvårdsverket). To simplify this process, these companies can also choose to authorise a PRO (like NPA or TMR) to handle these reporting obligations on their behalf.

According to regulation Ch. 11, §1, obligated producers are the following :

Anyone who by profession:

- fills or otherwise uses packaging (which is not a service packaging) for the purpose of protecting, presenting, or facilitating the handling of a product
- brings a packaged product to Sweden
- manufactures a service packaging in Sweden
- brings service packaging to Sweden
- from a country other than Sweden sells packaging or a packaged product to an end user in Sweden
- in Sweden manufactures or brings to Sweden a single-use

There is no threshold for the amount of packaging that must be licensed. Every kilogram of packaging must be covered by a licence fee.

Consumer packaging, group packaging, transport packaging and service packaging are all covered under the packaging reporting obligations. The rules also apply to packaging accessories such as lid and capsules.

According to the Swedish EPR system, packaging is defined as a single-use product or other product that has been manufactured to contain, protect or present a product or used to deliver a product or in other ways handle a product. Because of this distinction, reusable packaging that rotates in a market-driven system for reusable packaging registered to the Swedish EPA should not be considered.

Packaging that is part of an authorized return system including beverage containers with deposit refund should also not be taken into account for EPR reporting. See “exclusions” 6.3.1 for more information.

Reporting is required on a monthly or quarterly basis.

Due Dates:

- **Quarterly Reports:** April 25, July 25, October 25, and January 25.
- **Monthly Reports:** The 25th of the following month.

4. Eco-modulation

To encourage improved design for recycling, a multi-tiered fee structure is applied, particularly impacting plastic packaging and to a lower extent paper packaging. Glass, metal, wood, textile and ceramics are not subjected to eco-modulation. The lower plastic packaging fee is granted only to packaging that meets specific criteria for high recyclability and maintains quality during the recycling process. Key criteria include:

- **Mono-material composition:** Must be made of a single material such as polyethylene (PE), polyethylene-terephthalate (PET), or polypropylene (PP).
- **No problematic additives:** Must be free of fillers and adhesives or they should be limited to a certain threshold or compatible with recycling.
- **Color limitation:** Black color should be avoided and clear and transparent colors preferred. When black is present, an optical detection is required.
- **Print Surface limitations:** Print must cover no more than 60% of the outer surface, and the packaging must not be covered by a shrink sleeve unless proven separable.
- **Sealing films and absorbent** are tolerated under certain separability and compatible materiality conditions

Paper packaging is subject to a simplified two-tier system:

- **Lower Fee (Compatible with material recycling):** Typically applies to packaging containing >95% paper fibre and dissolvable adhesives.
- **Higher Fee (Partially or not compatible):** Applies to all other paper packaging.

5. Pre-requisite Activities Before Report Generation

Complete these steps to import your data and set up the system for report generation.

1. **Assign Roles:**
 - RDP_Data_Access_Admin for the for the Manage Data Access application
 - RDP_Report_Enabler for the Report Categories application
 - RDP_Report_Configuration_Expert for the Configure Reports application
 - RDP_Report_Execution_Expert and acrs-taxpack-business-user for generating the report in the Run Compliance Reports application
 - RDP_Report_Execution_Expert for the Reporting Dashboard and Analyze Reporting Data application
 - Other roles depending on the use case, see Initial Configuration - Roles.
2. **Import Data:** Import all data required for reporting and review it. For information about the minimum required data for generating the report, see Data Structure.
3. **Data Access Setup:** Provide access rights to company codes and sales organizations to report configuration experts. This is configured in the Manage Data Access application.
4. **Create/import required Master Data:** Create the report category based on the template and activate it. For instructions, see Templates for User-Defined Reports.
5. **Activate your report configuration.**
6. **Data Retrieval:** Data calculated for user-defined reports can be retrieved from the Analyze Reporting Data and Packaging Fees apps.

6. Rules for EPR Packaging Report Template

6.1. Country specific mandatory data field required

In addition to all standard required attributes, the following specific data fields are mandatory for accurate and consistent reporting results. Reports may be inconsistent if any of these fields are incomplete or contain null values.

Mandatory Conditions	Object Type	Sub-Object Type	Sheet	Column
Always	Product Extension	Product Extension	ProductExtension	Hazardous Product CLPEU
Always	Packaging Element	Packaging Element	PackElement	Description
Always	Packaging Element	Packaging Element	PackElement	Usage
Always	Packaging Element	Packaging Element	PackElement	Flexibility
Always	Packaging Element	Packaging Element	PackElement	Deposit
Always	Packaging Element	Packaging Element	PackElement	Service Packaging
Always	Packaging Element	Packaging Element	PackElement	Re-usable
When associated with Packaging Type CNR	Packaging Element	Packaging Element	PackElement	Volume
Always	Packaging Element	Packaging Element	PackElement	Optically Detectable
Always	Packaging Element	Basic Material Fraction	PackE_BasicMaterial Fraction	Transparency
Always	Packaging Element	Basic Material Fraction	PackE_BasicMaterial Fraction	Color
Always	Packaging Element	Basic Material Fraction	PackE_BasicMaterial Fraction	Thickness
Always	Packaging Element	Basic Material Fraction	PackE_BasicMaterial Fraction	Thickness UoM
Always	Packaging Element	Basic Material Fraction	PackE_BasicMaterial Fraction	Density
Always	Packaging Element	Basic Material Fraction	PackE_BasicMaterial Fraction	Density UoM

Always	Packaging Element	Basic Material Fraction	PackE_BasicMaterial Fraction	Expanded
Only relevant when packaging do have specific functions	Packaging Element	Functions	PackE_BMF_Functions	Function
On certain function type when requested by the calculation rules	Packaging Element	Functions	PackE_BMF_Functions	Weight in Percent
Either inform key or sub key or separability otherwise default values on main will be taken .	Packaging Composition	Packaging Composition	PackC_PackElement	Key
Either inform key or sub key or separability otherwise default values on main will be taken .	Packaging Composition	Packaging Composition	PackC_PackElement	Subkey
Always	Packaging Composition	Packaging Element	PackC_PackElement	Usage
Always	Packaging Composition	Packaging Element	PackC_PackElement	Separability
On main elements	Packaging Composition	Packaging Element	PackC_PackElement	Coverage

6.2. Pre-filled Data

Prior to the rules section, you will find the following information pre-filled in the report category that is created out of the template for Sweden EPR.

6.2.1 - Filters for Included Packaging

Packaging subject to the deposit-return scheme (DRS) is not included in this reporting scope. However, packaging that is *eligible* for the DRS but is not explicitly enrolled in the system is *not* excluded from the reporting requirements.

See 6.2.4. *Fractions group* of this section for the exclusion of service packaging.

See *section 6.3* for the exclusion rule on large containers.

6.2.2 - Report Fractions

The report fractions for the EPR packaging scheme have been defined in this section, and all required preliminary assignments are complete. Further information and specifics on these report fractions are available on the NPA guidance document on their [website](#). Note that this report incorporates the latest fee category changes between 2025 and 2026.

6.2.3 - Report Unit Categories

According to the NPA's Sweden EPR report, fees are calculated on a weight basis rather than a per-unit basis, thereby removing the requirement for unit-based fee reporting section.

6.2.4 - Fraction Groups

For Sweden's report, there is a single designated fraction group:

- **SERVICE_PACK:** This is utilized to accurately identify service packaging, which can subsequently be used for filtering in the relevant logistics process.

6.2.5 - Eco-modulation Criteria

Ecomodulation criteria and subcriteria are defined for report fractions that are ecomodulated (see section 4 of this report documentation). For instance, an ecomodulation criterion for flexible polypropylene plastics that converts into household waste is called PP_FLEX_PRIVATE_USE is defined including multiple subcriteria such as material, density, and color. Here is the list of subcriteria included in each ecomodulations:

Main material component	Eco-modulation Subcriteria										
	Material	Color	Shrink sleeve	Barrier	Sealing film	Print	Adhesive lamination	Absorbent	Attached closure	Glued label	IML labeling
PP_FLEX	x	x		x		<i>Not supported*</i>	x				
PP_RIGID	x	x	x	x	x	<i>Not supported*</i>		x			<i>Not supported*</i>
PE_RIGID	x	x	x	x		<i>Not supported*</i>					<i>Not supported*</i>
PE_FLEX	x	x		x		<i>Not supported*</i>	x				
PS_RIGID	x	x	x	x				x			x
PET_THERMOFORMED	x	x		x	x			x		x	
PET_BLOW_MOLDED	x	x	x	x					x		
NCOMPATIBLE_PLAS	General compatibility check										
PAPER_PRIVATE_USE	x										

**Not supported: subcriteria included in NPA's material assessment but not supported by UDR's current functionality and therefore excluded from this report.
See section 7 for more information on this limitation.*

Eco-modulation rules are not necessary for other material categories, such as wood and glass, as they rely on straightforward assignment rules.

The category **INCOMPATIBLE_PLAS** applies to plastic packaging that does not meet the criteria for lower fee levels (green or yellow plastic fees) while not directly assigned to any of the specific material guidelines provided by NPA for the assessment. Those material type are defined as following:

- Only rigid packaging made of PP, PE, PS and blow-molded or thermoformed PET, and flexible packaging made of PP and PE, are covered by the NPA guidelines. Plastic types *not* included in these criteria are automatically categorized at the Red fee level as they are incompatible with current recycling technology. Those include PET packaging that are not blow-molded nor thermoformed (e.g. Pallet Strap)
- If an inseparable packaging (e.g., a pouch with a zipper closure) has both flexible and rigid parts made of the *same* plastic type (e.g., all PP), the fee level is determined by the surface area of the largest part. If the largest part is flexible, report it under the corresponding flexible packaging fee level (e.g., PP flexible packaging). If the rigid and flexible parts are made of *different* plastic types, and the combination is anything *other than* PE and PP, the packaging cannot qualify for the Green or Yellow fee levels and is therefore categorized at the Red fee level (INCOMPATIBLE_PLAS).

6.3. Rules for determining report fractions

The system for assigning fee categories is based on the definition of a "disposal unit." According to the NPA guidelines, a disposal unit is defined as all packaging components that are non-dissociable from one another. Separable components are defined as parts meeting one of the following criteria: They are parts that must be separated to access the product itself (e.g., a screw cap). They are parts that the consumer can easily separate, provided there is a clear instruction and a mechanical aid (such as a perforation). The fee category assigned to the entire unit is determined by its main component (the heaviest fraction, or the largest surface area in the case of flexible materials).

For example, if a PET bottle includes a non-removable paper label and a non-separable PP sleeve, the entire item is treated as a single disposal unit. The fee category assigned is PET, as the main component, and this category is applied to the total weight of the bottle, the sleeve, and the label.

To implement this principle in the report, the *disposal unit* feature in the UDRs was utilized. This led to the development of the following calculation rule for the report: "Assign dominant report fraction to the entire disposal unit".

Rules assign reporting fractions based on packaging composition and effective usage, categorized as either household or non-household use — referred to in NPA standards as "for private use" and "other than private use", respectively. For plastic and paper packaging,

ecomodulation criteria are applied (see *section 4* on Ecomodulation). For other packaging materials, such as wood, reusability is additionally assessed in the case of other than private use packaging.

Rules were also established to identify "service packaging" and define its reporting fraction group. Service packaging is clearly detailed in NPA documentation as packaging that is filled at the point of sale or used for unprocessed agricultural or horticultural products (e.g., carrier bags, pizza boxes). For this type of packaging, reporting is the responsibility of the manufacturer.

6.3.1. Exclusions

Through specific calculation rules, the following packaging have been excluded from reporting:

1. Large containers
2. Packaging containing hazardous waste

6.3.1. Eco-modulation rule definition

First, a set of rules is applied per material to define the intermediary eco-modulation subcriterion rating for each packaging element or disposal unit (e.g., assigning a "green" rating for the colour subcriterion).

Second, additional rules are then used to calculate the overall final scoring (or main score). This total score ultimately determines the assigned fee level.

7. Limitations

This section outlines the current limitations, including any unsupported eco-modulation subcriteria or conditions within the template. The limitations are a consequence of the limitations within the UDR system itself. Note that all limitations have been flagged to the UDR's development teams and are at various stages of development. This report feature will be improved in future updates as new functionalities are developed to address current limitations.

7.1. Filters and exclusions

- The report does not automatically exclude reusable packaging that is not part of a formal deposit-return system. The UDR's *isreusable* attribute only indicates the *potential* for reuse, which does not guarantee that the packaging is part of a reusable system as required by the NPA. Therefore, this indicator alone is insufficient to meet the NPA's condition for obtaining an exemption from the Swedish EPA for exclusion.
- This version of the report does not include the exclusion for rolls, tubes, cylinders, and various other miscellaneous materials requested by NPA.

- The exclusion of large containers (>1000 L) is currently limited to containers with the CNR packaging type while this exclusion should be applied universally across all packaging types to ensure alignment with NPA.

7.2. Eco-modulation Rules

To ensure readiness for compliance, a cautious approach was used for the ecomodulation results. This approach addresses the initial limitations outlined in the continuity section.

7.2.1 General cross material limitations

The Eco-modulation conditions are constrained by the following limitations that affect various materials simultaneously:

- Adhesive lamination type detection : it is not possible to distinguish one specific adhesive from another.
- **Print coverage detection:**
The print surface area coverage subcriteria will be removed from the evaluation for the following reasons:
 - No dedicated attribute exists for print surface area coverage. The current coverage function calculates all coverage types collectively, including non-print elements, making it impossible to isolate print-specific data.
 - Print cannot be detected independently as it is integrated within a broader function that encompasses glue and coating applications.
 - Removing this subcriteria will not critically affect the overall categorization, as it represents only one of 5 evaluated subcriteria.
- Solvent-based EVOH check
- Melting point check
- Tie layer PA6/66 detection
- IML label detection
- **Shrink sleeve coverage:** Overall coverage percent is assessed but includes other packaging elements coverage on main element within its disposal unit
- PE-g-MAH barrier check
- The current assessment incorrectly overlooks the functions of barriers, fillers, adhesives, and other components when they are present on subordinate packaging elements. These functions are only accounted for if they reside on the main element.

7.2.2. Potential discrepancies and deviations in definitions

Because the UDR lacks an attribute to distinguish the manufacturing process of packaging elements, the differentiation between PET blow-molded and PET thermoformed packaging was based on packaging type and thickness approximations:

- **PET Thermoformed Packaging** is generally defined by a thickness not exceeding 2 mm and includes the following packaging types: APL (Applicator), BLS (Blisters), CPS (Capsule), CUP (Cup), CUT (Spoon, b90 cutlery), DSP (Display Stand), JAR (Jar, jug), TBW (tableware) and TRY (tray)
- **PET Blow-Molded Packaging** types include: BTL (Bottle), CAN (Can, drum, barrel), FLA (Flask, vial, ampule), and GAC (Gas or aerosol can).
- A **JAR packaging type** can be produced using either a blow-molded or a thermoformed manufacturing process. However, due to limitations in the SAP coding system, the decision was made to exclusively associate JAR packaging with PET thermoformed production.

7.2.3. Limitations that are material specific

Flexible Polypropylene and polyethylene :

- If the material is not explicitly labeled as PP but contains fractions like BOPP, OPP, or P-g-MAH, these specific fractions will not be detected as PP. Consequently, there is a risk that the material could be miscategorized as a non-PP material, leading to the application of an incorrect fee structure.
- If the material is not explicitly labeled as PE but contains fractions like LLDPE, MDPE, MDOPE, BOPE, PE-g-MAH these specific fractions will not be detected as PE. Consequently, there is a risk that the material could be miscategorized as a non-PE material, leading to the application of an incorrect fee structure.
- If EVOH is reported solely as a basic material fraction and not as a function, the report will not recognize its presence as a barrier material.
- Since the total filler content cannot be precisely calculated, thresholds are established based on individual filler types, specifically differentiating between organic and inorganic materials. A work-around solution was put into place: a 5wt% total threshold is applied to each category: 5% for organic filler and 5% for inorganic filler.
- The print coverage subcriteria has been removed from the assessment because it cannot be implemented with the current capabilities of the UDRs. This removal is not expected to critically impact the overall categorization for the following reasons: It is only one of five subcriteria evaluated. The subcriteria provided limited differentiation, as it offered only two possible outcomes (green and yellow).
- (Flexible polyethylene only) Due to UDR limitations, a solvent-based barrier cannot be detected. While a PA barrier is detectable, specific information such as PA66, its melting point, or the composition of its tie layer, cannot be determined.
- For packaging composed of non-separable elements, the barrier assessment will focus solely on the main packaging component, excluding any separate elements.

Rigid Polypropylene and polyethylene :

- If the material is not explicitly labeled as PP but contains fractions like BOPP, OPP, or P-g-MAH, these specific fractions may not be detectable. Consequently, there is a

risk that the material could be miscategorized as a non-PP material, leading to the application of an incorrect fee structure.

- If the material is not explicitly labeled as PE but contains fractions like LLDPE, MDPE, MDOPE, BOPE, PE-g-MAH these specific fractions will not be detected as PE. Consequently, there is a risk that the material could be miscategorized as a non-PE material, leading to the application of an incorrect fee structure.
- Since the total filler content cannot be precisely calculated, thresholds are established based on individual filler types, specifically differentiating between organic and inorganic materials. A work-around solution was put into place: a 5wt% total threshold is applied to each category: 5% for organic filler and 5% for inorganic filler.
- The assessment no longer includes IML detection because the UDR's features do not support it. This omission is not anticipated to significantly affect the overall categorization. This is because IML detection is only one of five evaluated subcriteria, and the subcriteria as a whole offered only limited differentiation.
- The methodology for measuring shrink sleeve coverage is conservative: it includes the coverage of *all* sub-elements of the disposal unit, not just the sleeve itself, when the unit comprises multiple covering parts. While the actual sleeve coverage will inevitably be less than or equal to the total measured coverage, this approach may incorrectly lower the fee categorization.
- When packaging contains non-separable components, the assessment of the barrier and adhesive lamination criteria will focus exclusively on the main part (such as the body of a bottle). These criteria will not be applied to any separate, non-removable elements (like a sleeve).

Rigid Polystyrene:

- The print coverage subcriteria has been removed from the assessment because it cannot be implemented with the current capabilities of the UDRs. This removal is not expected to critically impact the overall categorization for the following reasons: It is only one of five subcriteria evaluated. The subcriteria provided limited differentiation, as it offered only two possible outcomes (green and yellow).
- The assessment no longer includes IML detection because the UDR's features do not support it. This omission is not anticipated to significantly affect the overall categorization. This is because IML detection is only one of five evaluated subcriteria, and the subcriteria as a whole offered only limited differentiation.
- The system (UDR) has limited functionality and cannot reliably identify the Barrier PE-g-MAH material. Consequently, checks for this material have been disregarded, as including them would incorrectly assign a yellow status to many subpackaging categories that should be accurately classified as red.

Blow-molded rigid PET:

- Since the UDR cannot distinguish packaging element manufacturing processes, the split between PET blow-molded and PET thermoformed packaging relied on approximations of packaging type and thickness. See section 7.2.2.
- The documentation has a conflict: UDRs list oxygen scavengers as an excluded additive, while the NPA definition calls them a barrier. Treating them as an additive results in an automatic red scenario under material

- criteria, contradicting the yellow rating they get as a barrier.
- The print coverage subcriteria has been removed from the assessment because it cannot be implemented with the current capabilities of the UDRs. This removal is not expected to critically impact the overall categorization for the following reasons: It is only one of five subcriteria evaluated. The subcriteria provided limited differentiation.
 - For packaging composed of non-separable elements, the barrier assessment will focus solely on the main packaging component, excluding any separate elements.
 - The methodology for measuring shrink sleeve coverage is conservative: it includes the coverage of *all* sub-elements of the disposal unit, not just the sleeve itself, when the unit comprises multiple covering parts. While the actual sleeve coverage will inevitably be less than or equal to the total measured coverage, this approach may incorrectly lower the fee categorization.

Thermoformed rigid PET:

- Since the UDR cannot distinguish packaging element manufacturing processes, the split between PET blow-molded and PET thermoformed packaging relied on approximations of packaging type and thickness. See section 7.2.2.
- The print coverage subcriteria has been removed from the assessment because it cannot be implemented with the current capabilities of the UDRs. This removal is not expected to critically impact the overall categorization for the following reasons: It is only one of five subcriteria evaluated. The subcriteria provided limited differentiation.
- For packaging composed of non-separable elements, the barrier assessment will focus solely on the main packaging component, excluding any separate elements. The sealing subcriteria is impacted by this, in addition to the barrier subcriteria, for PET thermoformed materials.
- The UDR system's limitations necessitate ignoring the temperature condition for alkaline solubility (below 70°C). This omission poses a risk of incorrectly classifying packaging as "green" if it is only soluble at temperatures exceeding 70°C. Furthermore, adhesive reactivation is also not accounted for.

8. Logistic Processes

For details about report logistic processes, see the Report Logistic Processes section in the report category template in SAP Responsible Design and Production.

9. Preparing Final Report Output

To analyze your report data after creating and activating a report configuration, use the Analyze Report Data app.

Key Steps:

1. Set the filters for the relevant report configuration and period.
2. Include the following columns in your analysis:
 - Report Fraction
 - Eco-modulation Rating

- Chargeable Weight
- Modulated Weight-Based Fee

Note: The Packaging Fees app provides a view of the eco-modulation subcriterion ratings under the Eco-modulation tab.