The 2020 rate for recycling of household packaging

The guide

Not binding for informational purposes only
The purpose of the 2020 guide is to explain the 2020 rate for recycling of household packaging. It is not contractually binding. View the 2020 rate with the contractual prices.
The 2020* rates, designed to develop the recycling of your packaging.

From consumers to elected representatives, from manufacturers to recyclers, we have all become acutely aware of how urgent and important it is to recycle packaging more and better.

Preserving natural resources and reducing waste volumes: these are our shared aspirations, and the 2020 rate for recycling household packaging reflect this. Its objective is to encourage our customers to achieve 100% recyclable packaging.

It has been thought to encourage you to use materials that already have mature and lasting recycling systems and to limit the use of packaging that disrupts recycling, when there are already possible, viable and operational alternatives already exist.

Throughout the year Citeo accompanies you and provides you with tools and tools services to enable you to assess and improve the recyclability of your packaging; our teams are mobilized to help you in your efforts eco-design and develop their recycling.

The rates in summary

- New rates for materials
- Cumulative bonuses maintained
- 3 gradual penalties to be instituted

* The 2020 rate applies to 2020 releases that will be reported in early 2021
Understanding the 2020 rate for recycling of household packaging
A closer look at... the basic definitions

What is recyclable packaging?

Packaging is said to be recyclable if it —from as early as now— is able to enter a recycling channel, i.e. if it can be:

- Collected...
- Sorted...
- Recycled... to make new packaging or a new product (NF EN ISO 14021 standard).

... at a national level

The associated components (stoppers, labels, lids, decorations, inks, adhesives, etc.) and other additives (inks, glues, dyes...) that go into packaging can disrupt the stages in the recycling process and impact recyclability.

On the other hand, we talk about non-recyclable packaging when there is no technological solution allowing the reuse of material or industrial capacities industrial recycling.

Non-reusable packaging is defined as packaging that is not recoverable when certain forms of recovery (material or energy recovery) are not possible.

What is a mature recycling system?

A mature recycling chain is a well-established industrial chain, in which the material benefits from recyclers (end users of the material) able to take over all the deposits produced by the sorting centres.

In France 70% of packaging is recycled. Daily, Citeo works with its partners to optimize their collection, particularly in urban areas, modernize industrial sorting centres and invent new ways of recycling channels and high value-added outlets.

The recyclability of a packaging depends therefore:
- of all materials and the additives that make it up.
- the existence of instructions of sorting.
- the existence of a system of collection.
- the existence of industrial recycling plants available.

To find out if your packaging is recyclable, take the short test in just a few clicks at:

tree.tree.citeo.com
The target of the 2020 rates: encouraging the use of recyclable packaging

- THE RATES encourage the use of packaging with mature and sustainable recycling channels.
- BONUS/PENALTY encourages to avoid the presence of disturbances and to gain in circularity by integrating recycled material and/or encouraging sorting.

NEW RATES FOR PLASTICS

Today, there exists only one rates class for plastics, even though they are covered by recycling channels with very different maturity levels. In 2020, new rates were rolled out for to reflect the degree of development achieved by recycling channels and allow you to better measure the level of recyclability of your packaging.

<table>
<thead>
<tr>
<th>TYPE OF PACKAGING</th>
<th>EXAMPLES OF PACKAGING</th>
<th>MATERIAL RATE</th>
<th>PACKAGING MATERIAL END OF LIFE CYCLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottle and vial in clear PET</td>
<td>Mineral water bottle, soda bottle</td>
<td>6.1</td>
<td>Packaging with the most developed recycling channel, with a high trade-in price</td>
</tr>
<tr>
<td>Bottle and vial in coloured PET, in PE or PP</td>
<td>Mineral water bottle, drinks</td>
<td>6.2</td>
<td>Packaging with well-established recycling channels</td>
</tr>
<tr>
<td>Rigid packaging in PE, PP or PET</td>
<td>Trays, jars</td>
<td>6.3</td>
<td>Packaging that falls under the Extended Sorting Guidelines for all packagings (ESG) for which recycling channels are quickly developing; there are already value-added opportunities; it is now a matter of ramping them up to accommodate the new resource.</td>
</tr>
<tr>
<td>Flexible PE packaging</td>
<td>Pooling film, economat bag, frozen products bag, parcel setting cushions</td>
<td>6.4</td>
<td>Packaging that falls under the ESG, for which a channel is under development.</td>
</tr>
<tr>
<td>PS rigid packaging</td>
<td>Yoghurt pot, meat tray, sour cream jar, box of eggs, TV packaging material</td>
<td>6.5</td>
<td>Packaging that falls under the ESG, for which a recycling channel is just starting to develop, with initial experimentation; it is now a matter of finding opportunities with added value.</td>
</tr>
<tr>
<td>Complex packaging or other resins excluding PVC</td>
<td>Pack of chips, compote pouch, PLA bottle</td>
<td>6.6</td>
<td>Packaging with no existing recycling channel, but outlets for reuse.</td>
</tr>
<tr>
<td>Packaging containing PVC</td>
<td>Detergent pod, tray with sealing, medication blister pack</td>
<td>6.7</td>
<td>Packaging without recycling channel and with no outlets for additional reuse (Solid recovered fuel).</td>
</tr>
</tbody>
</table>

* See definition on opposite page.
** Wood and cork are renewable natural materials. In the household packaging sector, in the absence of a recycling sector, they are recoverable in terms of energy. See details in the sheet of material rate 7.1.
The 2020 rate applied to each declaration

Depending on the number of Consumer Sales Units (CSU)* placed on the market, choose the most appropriate declaration.

### DECLARATIONS AND FLAT RATE

#### DECLARATION BY CSU
Declaring CSUs placed on the market, shown by weight and by material.

#### SECTOR-SPECIFIC DECLARATION
Declaring by product family.
This option is available to customers who place less than 500,000 CSUs on the French market per year.

#### FLAT RATE AT €80
No declaration.
It may be chosen by customers who place less than 10,000 CSUs on the French market per year.

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**NOTE**

Increase for late submission of 2020 declaration
The deadline for filing a declaration for packaging placed on the market is 28 February 2021. In the event of a late submission, add-ons will be applied as follows:
- **0.5% increase** on declarations filed from 1 March 2021;
- then **1% increase** on a declaration filed from 1 September 2021.

**View the 2020 rate**

**AT YOUR SERVICE**
To simplify your procedures at the time of your declaration on your customer space clients-emballages.citeo.com, we offer you the type of statement that appears to be the most suitable for your situation.
You can change the formula at any time in compliance with the conditions of eligibility.

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*In case of an annual contribution of less than €80 excluding VAT, a fixed amount of 80 € excluding VAT, is invoiced.*

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*A Consumer Sales Unit (CSU) is a unit of packaged product which a consumer can buy separately from others. Example: one pack of 4 yoghurts, one television, one bottle of water, one promotional pack of 2 shampoos, one shipping package, etc. A CSU can be composed of different elements of different materials.*
A closer look at declaring by CSU

A declaration concept in which the CSU becomes the reference unit.

The contribution by CSU is calculated based on the number of Packaging Units

A packaging unit is a component of packaging that can be separated from the product when consumed or used by a household.

All stoppers or closures (detachable stoppers, peel-off lids, lids, parts of blister packs without perforation etc.) are considered to be separate packaging units and must be declared separately. (See complete definition in the Declaration Guide).

SOME EXAMPLES TO ILLUSTRATE

**A separable tray =**
2 packaging units

1 peel-off lid  +  1 tub

**A tea box =**
21 packaging units

1 cardboard sleeve  +  20 individual plastic bags

**One shipping carton =**
3 packaging units

cardboard  +  2 bolsters

**A beauty kit =**
5 packaging units

1 kit bag  +  1 tube with 1 cap  +  1 aerosol with 1 stopper
Contribution by weight of material

- A differentiated tariff to each of the following materials:

<table>
<thead>
<tr>
<th>MATERIALS</th>
<th>Rate in ct €/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>4.55</td>
</tr>
<tr>
<td>Aluminium</td>
<td>11.45</td>
</tr>
<tr>
<td>Paper &amp; Cardboard</td>
<td></td>
</tr>
<tr>
<td>Paper/cardboard</td>
<td>16.53</td>
</tr>
<tr>
<td>Brick</td>
<td>24.61</td>
</tr>
<tr>
<td>Glass</td>
<td>1.35</td>
</tr>
<tr>
<td>Plastic</td>
<td></td>
</tr>
<tr>
<td>Bottle and vial in clear PET</td>
<td>28.88</td>
</tr>
<tr>
<td>Bottle and vial in coloured PET,</td>
<td>30.92</td>
</tr>
<tr>
<td>in PE or PP</td>
<td></td>
</tr>
<tr>
<td>Rigid packaging in PE, PP or PET</td>
<td>33.30</td>
</tr>
<tr>
<td>Flexible PE packaging</td>
<td>36.08</td>
</tr>
<tr>
<td>PS rigid packaging</td>
<td>38.85</td>
</tr>
<tr>
<td>Complex packaging or other resins excluding PVC</td>
<td>41.63</td>
</tr>
<tr>
<td>Packaging containing PVC</td>
<td>48.57</td>
</tr>
<tr>
<td>Other materials</td>
<td></td>
</tr>
<tr>
<td>Wood, cork, textiles, etc.</td>
<td>41.63</td>
</tr>
<tr>
<td>Stoneware, porcelain, ceramic</td>
<td>48.57</td>
</tr>
</tbody>
</table>

- Discount for the use of recycled/cardboard:
The weight of paper and cardboard packaging incorporating raw materials from recycling is reduced by 10% if more than 50% of the packaging’s total weight consists of recycled material. To benefit from the discount, a certificate may be sent from the packaging supplier.

Contribution by CSU

For each CSU, the basic contribution is €0.0656 adjusted according to the number of Packaging Units that make up the CSU.

<table>
<thead>
<tr>
<th>Adjustment rules</th>
<th>Number of units per CSU</th>
<th>% adjusted</th>
<th>Price per CSU in € ct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 unit = no modulation</td>
<td>1</td>
<td></td>
<td>0.0656</td>
</tr>
<tr>
<td>2 to 5 units = 80% adjustment for each unit</td>
<td>2</td>
<td>80%</td>
<td>0.1181</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>160%</td>
<td>0.1706</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>240%</td>
<td>0.2230</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>320%</td>
<td>0.2755</td>
</tr>
<tr>
<td>6 to 10 units = 60% adjustment for each unit</td>
<td>6</td>
<td>380%</td>
<td>0.3149</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>440%</td>
<td>0.3542</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>500%</td>
<td>0.3936</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>560%</td>
<td>0.4330</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>620%</td>
<td>0.4723</td>
</tr>
<tr>
<td>11 to 15 units = 40% adjustment for each unit</td>
<td>11</td>
<td>660%</td>
<td>0.4986</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>700%</td>
<td>0.5248</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>740%</td>
<td>0.5510</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>780%</td>
<td>0.5773</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>820%</td>
<td>0.6035</td>
</tr>
<tr>
<td>From 16 to 20 units = 20% adjustment for each unit</td>
<td>16</td>
<td>840%</td>
<td>0.6166</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>860%</td>
<td>0.6298</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>880%</td>
<td>0.6429</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>900%</td>
<td>0.6560</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>920%</td>
<td>0.6691</td>
</tr>
<tr>
<td>From 21 units = modulation of 10% for each unit</td>
<td>21</td>
<td>930%</td>
<td>0.6757</td>
</tr>
</tbody>
</table>

For CSUs composed solely of one or more units less than 0.1 g, the base contribution is 10% of €0.0656 ct.
Close-up on
the majority-material simplification rule

To make the declaration process easier, when more than 80% of a given packaging unit is made of a single material, you can declare the unit weight as that of the majority material.

Examples:
• a cardboard toy box with a plastic window
• a glass pot with its steel hinge
• a glass perfume bottle with a plastic pump
• a steel and aluminium can

This simplification rule cannot be applied to:
• bricks, which have their own specific rate
• packaging with a body made of plastic material

If the majority material rule (80/20) cannot be applied, the weight of the packaging unit must reflect that of each of the materials that go into it.

Examples:
• Bottle made of 60% glass and 40% metal
• Box made of 70% cardboard and 30% PE plastic
The Bonus/penalty system

The eco-modulation system was designed to encourage eco-design of packaging and integration of recycled materials, as well as awareness-raising about sorting, and to encourage companies to use packaging that is free of disrupting materials and recyclable. For this purpose, 4 cumulative bonuses and 3 progressive penalties are now in effect.

4 CUMULATIVE BONUSES

to encourage eco-design of packaging and raise awareness about sorting

5% or 8% bonus
Triman alone or with sorting guidelines block

4% bonus
Media awareness campaign

8% bonus
Reduction at the source (reduction in unit weight or number)

50% bonus
Integration of recycled materials, for packaging in PE and PP

LOOKING AHEAD TO 2021

The progressive scale applicable to bonuses for the integration of post-consumption recycled materials is already underway for 2021:

For PEs and PPs
30% bonus when 50% of post-consumption recycled material from packaging (household or industrial and commercial) is integrated
50% bonus if at least 20% of this post-consumption recycled material comes solely from packaging Household

For PS
20% bonus when 50% of post-consumer recycled material from household packaging is integrated

The objective of the 2020 guide is to explain the 2020 rate for recycling of household packaging. It has no contractual value. Consult the 2020 rate with all the prices contractual.
3 PROGRESSIVE PENALTIES

To encourage the abandonment of non-recyclable or recycling-disruptive packaging, while leaving time to implement alternative solutions. This principle makes it possible to have a measured financial impact for new malus while encouraging eco-design approaches with the prospect of the evolution of their increase.

Level 1 penalties with a 10% rate

New penalties have been incorporated into the rate.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CHARACTERISTICS</th>
<th>MAIN ISSUES AT STAKE FOR RECYCLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>With a non-magnetic steel closing system</td>
<td>Quality of recycled material, a key safety issue for operators and an industrial tool degradation matter</td>
</tr>
<tr>
<td>Rigid plastic (rates 6.2, 6.3, 6.5, 6.6 and 6.7)</td>
<td>Dark, not detectable by optical sorting, in particular containing carbon black</td>
<td>Loss of material at the sorting stage</td>
</tr>
<tr>
<td>Rigid plastic (rates 6.2 and 6.3)</td>
<td>Out of PE, PP packaging with a density greater than 1</td>
<td>Material loss</td>
</tr>
<tr>
<td>Bottle and vial in PET (rates 6.1 and 6.2)</td>
<td>Containing glass beads</td>
<td>Quality of the recycled material and deterioration of the industrial tool</td>
</tr>
<tr>
<td>Cardboard-paper packaging</td>
<td>Containing printing with inks manufactured with the addition of mineral oils*</td>
<td>Quality of recycled material</td>
</tr>
</tbody>
</table>

* The “mineral oils” penalty will apply only to the contribution by weight of the cardboard-paper. The other materials that can be considered CSU are not affected by these rules.

Level 2 penalties with a 50% rate

The penalties already in existent in 2019 are at least 50%, with an increase in the rate to come.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CHARACTERISTICS</th>
<th>MAIN ISSUES AT STAKE FOR RECYCLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>Other than soda-lime</td>
<td>Quality of recycled material</td>
</tr>
<tr>
<td>Glass</td>
<td>Soda-lime with associated infuse elements (porcelain, ceramic, sandstone, etc.)</td>
<td>Damage to industrial facilities</td>
</tr>
<tr>
<td>Cardboard</td>
<td>Reinforced</td>
<td>Damage to the industrial facilities (process blockage)</td>
</tr>
<tr>
<td>Bottle, vial and rigid plastic in PET (rates 6.1, 6.2 and 6.3)</td>
<td>Combined with aluminium, PVC or silicone with density greater than 1</td>
<td>Quality of the recycled material and deterioration of the industrial tool</td>
</tr>
</tbody>
</table>

Level 3 penalties with a 100% rate

Some existing penalties turn directly into 100% penalties.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CHARACTERISTICS</th>
<th>MAIN ISSUES AT STAKE FOR RECYCLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottle, vial and rigid plastic in PET (rates 6.2 and 6.3)</td>
<td>In opaque PET (mineral filler &gt; 4%)</td>
<td>Issues at stake in outlets</td>
</tr>
<tr>
<td>Bottle and vial in PVC (rate 6.7)</td>
<td>Packaging in 2020 in national sorting guidelines, but non-recyclable and non-recoverable</td>
<td>Material loss</td>
</tr>
</tbody>
</table>
Some subjects are under study by Citeo and/or the actors of the sector in order to improve the recyclability of packaging.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>SUBJECT TO STUDY</th>
<th>MAIN ISSUES AT STAKE FOR RECYCLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardboard</td>
<td>Presence of a substance that disrupts recycling</td>
<td>Quality of recycled material</td>
</tr>
<tr>
<td></td>
<td>Containing 50% to 80% of paper/cardboard material</td>
<td>Loss of material</td>
</tr>
<tr>
<td>Glass</td>
<td>With an ultra-adhesive label</td>
<td>Loss of material and quality of recycled material</td>
</tr>
<tr>
<td></td>
<td>Non-translucent</td>
<td>Loss of material in cullet preparation</td>
</tr>
<tr>
<td>PET bottle and vial</td>
<td>Containing flammable gases</td>
<td>Operator and industrial tool risks</td>
</tr>
<tr>
<td></td>
<td>With sleeve</td>
<td>Material loss stemming from sorting and recycling stages</td>
</tr>
</tbody>
</table>

Citeo shares these subjects with you to enable you to identify the eco-design difficulties on which work is currently being carried out. Depending on the results, some of these topics could be considered in eco-modulation in the coming years.
Our tools and services to facilitate your declaration process

To understand the principles of the rate for recycling household packaging and for facilitate your declaration, Citeo provides tools and services included in your contribution. Our teams are also at your side for your demarches and for any questions.

Online customer space
Find all the documents you need and practical guides for your teams and service providers in your personalised customer space:
clients-emballages.citeo.com

Contribution simulator
Find out now how much you will contribute in 2020, using the simulator accessible from your customer space:
clients-emballages.citeo.com

Telephone support
Have a question? Need advice? Reach your usual customer contact or one of our advisers at 0 808 80 00 50 (free service + price of call)

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AT YOUR SERVICE

sprint
La déclaration à toute allure

The automatic pre-completed declaration solution

Based on a robust calculation method, Sprint is available as an option to all customers who have chosen the CSU declaration.

Sprint is above all a considerable time saver: no need to hunt down multiple technical characteristics, nor to enter in detail thousands of references in the submission file.

On average, you will have 30 to 60% of lines in less to enter in detail!
Declaration by CSU: find your material rate quickly and easily
Each material rate has its own fact sheet!

The fact sheets on rates by material help you find:

1. **Information on the rate by material**
   Sorting instructions, recyclability, opportunities, technical information for those wishing to find out more, and keys for recognising packaging types.

2. **The bonuses and penalties applicable to this specific material rate**
   To identify which penalties and bonuses can impact the rate, based on the exact nature and characteristics of the packaging.

3. **Citeo commitments**
   Additional information on the initiatives set in motion by Citeo and its partners.
**PAPER – CARDBOARD**

**SORTING INSTRUCTIONS**
Cardboard packaging has been included in national sorting guidelines since 1993.

**RECYCLING**
In 2018 the recycling rate for paper/cardboard was 69%. The challenges for the sector today: limiting the quantity of other materials combined with paper and cardboard, avoiding reinforced packaging, and avoiding the use of inks with "mineral oils" that can weaken the circular economy.

**OUTLETS**
Out of 1,000 kg of paper/cardboard from selective collection, after recycling,
- 1 box of cereals = egg box (equivalent)
- 7 toy boxes in one cardboard box for 6 bottles

**RATE AND ECO-MODULATION**
- **Material rate by weight 3**: Paper and cardboard: 16.51 €/kg

<table>
<thead>
<tr>
<th>ACTION TAKEN</th>
<th>BONUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trim alone or with sorting guidelines block</td>
<td>5% Trim alone or 8% full sorting guidelines</td>
</tr>
<tr>
<td>Media awareness campaign</td>
<td>4%</td>
</tr>
<tr>
<td>Reduction at source</td>
<td>8%</td>
</tr>
</tbody>
</table>

**DISCOUNT FOR THE USE OF RECYCLED PAPER/CARDBOARD**
The contribution for paper and cardboard packaging that includes raw materials from recycling is reduced by 10% if more than 50% of the paper and cardboard packaging, toilet paper or insulation products (moulded cellulose for building).

**EMBLEMATIC PACKAGING:**

- **Opaque PET bottles and vials and packaging (mineral filler > 4%)**
  - Material rate by weight 6.2, Coloured PET, PE or PP bottles and vials: 30.92 €/kg

**ACTION TAKEN**
- Developing innovations for paper and cardboard packaging: this is the objective of Citeo through its collaboration with the Technical Paper Centre for a specific innovation programme for paper and cardboard packaging. The results for the 2019-2022 period. Citeo is investing €6.8 million in this partnership. Citeo is also a member of CEREC (the Evaluation Committee for the Recyclability of Paper/Cardboard Packaging), which helps companies to assess their technical choices with regard to the recyclability of their packaging.
- Supporting eco-design processes to improve the recyclability of paper and cardboard packaging: Citeo is a member of CEREC, the Evaluation Committee for the Recyclability of Paper/Cardboard Packaging.
  - To find out more: [ceres-entrelages.fr](http://ceres-entrelages.fr)
- Limiting mineral oils: Citeo has implemented an action plan to reduce the presence of mineral oils in paper-cardboard packaging and graphic paper. To offer guidelines to make the right eco-design choices and improve recycling loops for graphic paper and paper-cardboard packaging.
  - To find out more: [https://www.citeo.com/le-mag/525](https://www.citeo.com/le-mag/525)
STEEL

**EMBLEMATIC PACKAGING:**

**SORTING INSTRUCTIONS**
Steel packaging has been included in national sorting guidelines since 1993.

**RECYCLING**
Steel is a material that can be recycled without losing its technical properties. The challenges for the sector are compliance for the quality of the material upon reception at the steel mill, in particular by avoiding the presence of intertwined or plastic elements from the recycling process which could cause industrial damage and engender safety risks for personnel.

**OUTLETS**
Steel packaging from selective collection, contributes to the production of new steel, which will be used to manufacture cars, household appliances, construction elements and, of course, packaging.

1 tonne of recycled steel can be used to manufacture 13 washing machines or 14 metres of train rails.

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**FIND OUT MORE**

Steel packaging is easily recognisable: it is attracted to a magnet, since steel is magnetic!

In 2018, the recycling rate for steel packaging was 100%. This percentage is due to the inclusion of “bottom ash” steels, i.e. recovered after the incineration of household waste.

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**RATE AND ECO-MODULATION**

Material rate by weight, **Steel:** 4.55 €ct/kg

<table>
<thead>
<tr>
<th>ACTION TAKEN</th>
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<tbody>
<tr>
<td>Triman alone or with sorting guidelines block</td>
<td>5% Triman alone or 8% full sorting guidelines</td>
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<tr>
<td>Media awareness campaign</td>
<td>4%</td>
</tr>
<tr>
<td>Reduction at source</td>
<td>8%</td>
</tr>
</tbody>
</table>

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**CITEO COMMITMENTS**

To improve the sorting and quality of steel:
In partnership with the materials sectors for metals and in particular ARCELORMITTAL for steel, Citeo has produced a recommendation guide for improving the sorting of steel and aluminium packaging.
As part of the modernisation of sorting centres, this guide details the essential practices to be implemented to optimise the recovery of metal fractions to the greatest extent possible.

To find out more:
https://www.citeo.com/le-mag/securite-en-centre-de-tri-un-nouveau-guide-de-recommandations/
**ALUMINIUM**

**SORTING INSTRUCTIONS**
Aluminium packaging has been included in national sorting guidelines since 1993.

**RECYCLING**
In 2018, the recycling rate for aluminium packaging from selective collection was 44%. Representing 1.5% of deposits by weight, but 8% by number, small aluminium packaging, due to its size, is more difficult to recover at a sorting centre.

**OUTLETS**
For 1,000 kg of aluminium from selective collection, after recycling, 586 kg of recycled aluminium will be used for car wheel rims, radiators, soleplates for irons.
- 115 cans = one scooter
- 230 cans = one bicycle frame
- 2,900 cans = one radiator

**RATE AND ECO-MODULATION**

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<td>8%</td>
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**CITEO COMMITMENTS**

To recycle small item of aluminium packaging
- Set up in 2014 by CELAA, alongside Citeo, the French Financial Markets Authority (AMF) and the Endowment Fund for the recycling of small pieces of aluminium by Nespresso, the Metal Project set up the first recycling channel for light aluminium and steel packaging in France by acting on three levers:
  - simplifying sorting guidelines for residents
  - adapting the processes in the sorting centres for better collection of these small packaging items (27 sorting centres, serving 15 million inhabitants, are now equipped to industrially sort light metal packaging)
  - the identification of a new recovery technology for light aluminium packaging items (pyrolysis).

This new channel makes it possible to recover light metal packaging, which is in full expansion: sachets, bottle caps, lids, fresh cheese packaging, etc.

To find out more: [https://www.citeo.com/actualites/projet-metal-recycler-plus-de-petits-emballages-metalliques](https://www.citeo.com/actualites/projet-metal-recycler-plus-de-petits-emballages-metalliques)
MATERIAL RATE 3

PAPER – CARDBOARD

EMBLEMATIC PACKAGING:

SORTING INSTRUCTIONS
Card packaging has been included in national sorting guidelines since 1993.

RECYCLING
In 2018, the recycling rate for paper/cardboard packaging was 69%. The challenges for the sector today: limiting the quantity of other materials combined with paper and cardboard, avoiding reinforced packaging, and avoiding the use of inks with “mineral oils” that can weaken the circular economy.

OUTLETS
Out of 1,000 kg of paper/cardboard from selective collection, after recycling, 825 kg of paper/cardboard pulp is obtained, which will be used to make new paper, packaging, toilet paper or insulation products (moulded cellulose for buildings).

1 box of cereals = one egg box (equivalent)
7 toy boxes = one cardboard box for 6 bottles

RATE AND ECO-MODULATION

Material rate by weight 3, Paper and cardboard: 16.53 €ct/kg

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DISCOUNT FOR THE USE OF RECYCLED PAPER/CARDBOARD:
The contribution for paper and cardboard packaging that includes raw materials from recycling is reduced by 10% if more than 50% of the packaging’s total weight consists of recycled material.

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<th>ISSUES</th>
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<th>PENALTY</th>
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</thead>
<tbody>
<tr>
<td>Containing printing with inks manufactured with the addition of mineral oils</td>
<td>Quality of recycled material</td>
<td>Penalty level 1: 10% in 2020</td>
</tr>
<tr>
<td>Reinforced cardboard packaging</td>
<td>Damage to the industrial tool (process blockage)</td>
<td>Penalty level 2: 50% in 2021</td>
</tr>
</tbody>
</table>

CITEO COMMITMENTS

Developing innovation for paper and cardboard packaging: this is the objective of Citeo through its collaboration with the Technical Paper Centre for a specific innovation programme for paper and cardboard packaging. This means for the 2019-2022 period. Citeo is investing €1.8 million in this partnership. Citeo is also a member of CEREC (the Evaluation Committee for the Recyclability of Paper-Cardboard Packaging), which helps companies to assess their technical choices with regard to the recyclability of their packaging.

To find out more: https://www.citeo.com/le-mag/les-projets-davenir-du-materiau-papier-carton/

Supporting eco-design processes to improve the recyclability of paper and cardboard packaging: Citeo is a member of CEREC, the Evaluation Committee for the Recyclability of Paper-Cardboard Packaging.

To find out more:  https://cerec-emballages.fr

Limiting mineral oils: Citeo has implemented an action plan to reduce the presence of mineral oils in paper-cardboard packaging and graphic paper, to offer guidance to make the right eco-design choices and secure recycling loops for graphic paper and paper-cardboard packaging.

To find out more:  https://www.citeo.com/le-mag/525
Developing innovation for paper/cardboard packaging: the aim of Citeo through its collaboration with the Technical Centre for Paper is to set up a specific innovation programme for paper/cardboard packaging and bricks. This means for the 2019-2022 period, Citeo is investing €1.8 million in this partnership. Citeo is also a member of CEREC, the Evaluation Committee for the Recyclability of Paper-Cardboard Packaging, which helps companies to assess their technical choices with regard to the recyclability of their packaging.

To find out more: https://www.citeo.com/le-mag/les-projets-davenir-du-materiau-papier-carton/
MATERIAL RATE 5

GLASS

EMBLEMATIC PACKAGING:

SORTING INSTRUCTIONS
Glass has been collected and recycled in France since 1974. It is a pioneer in selective collection. Only glass packaging can be recycled, i.e. bottles, pots, jars, and bottles.

RECYCLING
Glass can be recycled infinitely. The recycling rate for glass from selective collection was 86% in 2018. When it arrives at the processing centre, the glass undergoes a whole series of sorting techniques to eliminate unwanted and polluted substances (metals, infusible materials such as porcelain and ceramic, and light elements such as paper, plastics and stoppers). Most of the cullet (recycled glass) is used to remake glass packaging by way of a closed loop.

OUTLETS
In France, the collection is made in combination with the different glass colours (brown, green, colourless, etc.). France has been pioneering and innovative in Europe, developing complementary industrial sorting by colour that separates coloured glass from colourless glass. This makes it possible to increase recycling capacities, in particular for colourless glass, without modifying the sorting process for the population and the collection system for local authorities. Closed loop recycling: a glass bottle becomes a bottle again.

RATE AND ECO-MODULATION

Material rate by weight 5, Glass: 1.35 ct €/kg

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<td>Glass packaging with a non-magnetic steel closing system</td>
<td>The quality of the recycled material is a safety issue for operators and an industrial tool degradation matter</td>
</tr>
<tr>
<td>Glass packaging other than soda-lime</td>
<td>Quality of recycled industrial material</td>
</tr>
<tr>
<td>Packaging made of soda-lime glass with associated infuse element (porcelain, ceramic, sandstone, etc.)</td>
<td>Damage to industrial facilities</td>
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</table>

CITEO COMMITMENTS

Developing the collection and sorting of glass: Developing the collection and sorting of glass: in the spirit of the first relaunch plan which, thanks to the setting up of 8,000 additional collection points, has enabled good growth in collection. Citeo is continuing and accelerating its actions to develop glass collection. To do that, 4 levers for action: developing glass sorting in major cities, modernising local collection, deploying incentive pricing and developing sorting outside the home. These levers will be based on encouraging people to sort glass, and on the commitment of local authorities so that each tonne of glass collected and recycled can save €130.

FIND OUT MORE
Special types of glass such as that used for light bulbs, crystal, glass dishwashers, mirrors and glass ceramic must not be used in sector or glass packaging recycling because their characteristics (melting temperature for example) may disrupt the recycling of the glass and damage the quality of production. The same applies to porcelain and ceramics, which are also disruptive to glass recycling.
BOTTLE AND VIAL IN CLEAR PET

EMBLEMATIC PACKAGING:

SORTING INSTRUCTIONS
Bottles and vials have been included in national sorting guidelines since 1993.

RECYCLING
The recycling rate for bottles and vials from selective collection was 58% in 2018. Material whose recycling channel is very well established. The main challenge for the sector today: the management of sleeves on PET bodies (risk of non-recognition of the PET bottle and removal from the recycling channel).

OUTLETS
Recycled clear PET makes it possible to manufacture new PET packaging (bottles, trays, etc.) or fibre (polyester) used in the textile or automotive sector. In France, PET is the only plastic material that can be reused in packaging in contact with food.

FIND OUT MORE
PET is the acronym for polyethylene terephthalate, indicated by number 1 in the European classification of plastics.

Clear PET bottle resources are essentially used for mineral water or soft drinks bottles that are clear or light blue in colour.

PET bottles and vials are recognised by the injection point at the bottom of the bottle (vs. a weld line for a PE bottle).

EMBLEMATIC PACKAGING:

MATERIAL RATE 6.1
RATE AND ECO-MODULATION

Rate 6.1, Bottle and vial in clear PET: 28.88 €ct/kg

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<td>Bottles and vials in clear PET containing glass beads</td>
<td>Quality issues for recycled materials and deterioration of industrial tools</td>
<td>Penalty level 1: 10%</td>
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<td>Rigid PET bottles, vials and packaging combined with aluminium, PVC, or silicone with a density greater than 1</td>
<td>Quality issues for recycled materials and deterioration of industrial tools</td>
<td>Penalty level 2: 50% in 2020 Penalty level 3: 100% in 2021</td>
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CITEO COMMITMENTS

Study on sleeves: integral sleeves have a negative impact on the recycling of PET bottles, regardless of their material. During the sorting phase, there is a risk that optical sorting may identify the material of the sleeve rather than that of the packaging body; during the recycling phase, the material of the sleeve disrupts the recycling of the PET or PE/PP caps. Citeo is working on this issue, in particular via a study on XPET sleeves and an R&D project on pre-cuts.

"Vous triez, nous recyclons": while PET bottles are 100% recyclable and 98% of French people know that they are sorted, only 1 out of 2 bottles is actually sorted and recycled. This led to the “Vous triez, nous recyclons” (“You sort, we recycle”) programme, a 3-year programme (2017-2019) to test innovative collection schemes and mobilise citizens to sort, in order to meet the EU’s target of 90% selective collection for the recycling of plastic bottles.

To find out more: http://www.voustrieznousrecyclons.com/
BOTTLE AND VIAL IN COLOURED PET, IN PE OR PP

EMBLEMATIC PACKAGING:

SORTING INSTRUCTIONS
Bottles and vials have been included in national sorting guidelines since 1993.

RECYCLING
The recycling rate for bottles and vials from selective collection was 58% in 2018. Materials whose recycling channel is very well established. The main challenges for the sector today: management of sleeves on the bodies of bottles and vials and quantity of opacifier used (opaque PET).

OUTLETS
From the collected PET, recycled PET used to manufacture textile fibres (polyester) will be obtained, and from PE and PP, materials will be obtained to manufacture pipes, automotive parts, etc.

RANGE AND ECO-MODULATION

Material rate by weight 6.2, Bottle and vial in coloured PET, in PE or PP: 30.92 €ct/kg

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<td>Rigid, dark plastic packaging, non detectable by optical sorting, in particular containing carbon black</td>
<td>Loss of material at the sorting stage</td>
<td>Penalty level 1: 10%</td>
</tr>
<tr>
<td>Rigid PE, PP plastic packaging with a density greater than 1</td>
<td>Material loss</td>
<td>Penalty level 1: 10%</td>
</tr>
<tr>
<td>Bottles and vials containing glass beads</td>
<td>Quality issues for recycled materials and deterioration of industrial tools</td>
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<td>Rigid PET bottles, vials and packaging combined with aluminium, PVC or silicone with a density greater than 1</td>
<td>Quality issues for recycled materials and deterioration of industrial tools</td>
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</tr>
<tr>
<td>Rigid opaque PET packaging with mineral filter greater than 4%</td>
<td>Market opportunities</td>
<td>Penalty level 3: 100% in 2021</td>
</tr>
</tbody>
</table>

CITEO COMMITMENTS

Opaque PET: In 2017, Citeo launched a Call for Projects dedicated to opaque PET.
The aim is to work on both:
• eco-design of the packaging concerned (reduce or even eliminate any mineral content, adapt the colouring to the specifications of product launchers and recyclers)
• recycling of opaque PET
• Citeo is also committed to the search for new outlets (return to packaging, chemical recycling, recycling to produce composite materials)

To find out more: https://www.citeo.com/le-mag/443
RIGID PACKAGING IN PE, PP OR PET

EMBLEMATIC PACKAGING:

SORTING INSTRUCTIONS
Rigid plastic packaging excluding bottles and vials is not included in national sorting guidelines. They cannot yet be deposited everywhere in sorting bins, but it is possible in areas that have transformed their local collection and sorting system (referred to as Sorting guideline extension areas).

RECYCLING
Rigid packaging and PE and PP PET bottles have the same characteristics but have some special features – caps on pots and trays, for example – that may impact recycling. The challenges for the channel: compatibility of associated materials (loss of quality and quality of recycled material), dark packaging (not detectable during optical sorting).

OUTLETS
Recycling channels are developing rapidly; there are already value-added outlets, identical to those for PE, PP and PET bottles. The challenge with the extended sorting guidelines is to include the new resources.

FIND OUT MORE
PE is the acronym for Polyethylene, indicated by the number 2 or 4 in the European classification of plastics depending on whether it is High Density (HDPE) or Low Density (LDPE); PP is for Polypropylene and bears the number 5, PET is for polyethylene terephthalate and bears the number 1.

Rigid packaging is characterised by a certain shelf life and resilience to distortion, with the exception of doypacks. The main part of the rigid packaging is generally thicker than 250 microns.

RATE AND ECO-MODULATION

Material rate 6.3, Rigid packaging in PE, PP or PET: 33.3 €ct/kg

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<td>50% in 2020 for 50% integration of rPE/rPP 30 % in 2021 for 50% integration of rPE/rPP 50% in 2021 if the share from household packaging is at least 20%</td>
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<td>Dark, rigid plastic package not detectable by optical sorting, in particular containing carbon black</td>
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<td>Penalty level 1: 10%</td>
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<td>Rigid PE, PP plastic packaging with a density greater than 1</td>
<td>Material loss</td>
<td>Penalty level 1: 10%</td>
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<tr>
<td>Rigid PET bottles, vials and packaging combined with aluminium, PVC or silicone with a density greater than 1</td>
<td>Quality of the recycled material and damage to industrial equipment</td>
<td>Penalty level 2: 50% in 2020 Penalty level 3: 100% in 2021</td>
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<td>Rigid opaque PET packaging with mineral filter greater than 4%</td>
<td>Market opportunities</td>
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CITEO COMMITMENTS

Developing recyclability and recycling channels:
Since 2012, Citeo has launched numerous calls for eco-design projects in order to prepare the integration of rigid plastic packaging into the national guidelines by 2022. Solutions to achieve 100% recyclable packaging are being studied, such as:
• the switch to single-material and recyclable packaging;
• the search for alternatives to dark dyes that cannot be detected by optical sorting.

This work is continuing with the new wave of calls for proposals launched in 2019, in particular the search for caps compatible with recycling rigid packaging, such as trays.

Citeo also supports the industrial initiative of the French group, SOPREMA, which specialises in solutions for eco-responsible buildings, which has set up a PET tray and complex PET packaging recycling plant. Sopraloop offers a new life for this packaging, which has been transformed into insulation materials.

To find out more: https://www.citeo.com/le-mag/sopraloop-une-usine-la-pointe-du-recyclage-des-emballages-en-pet
FLEXIBLE PE PACKAGING

EMBLEMATICT PACKAGING:

SORTING INSTRUCTIONS
Flexible plastic packaging is not included in national sorting guidelines. They cannot yet be deposited everywhere in sorting bins, but it is possible in areas that have transformed their local collection and sorting system (referred to as Extended Sorting Guidelines).

RECYCLING
The channel is under development in France. The main challenges for the channel: solving the problems of separability and compatibility of materials or resins other than PE (example of the tap for in bag in boxes, the handle on the films for grouping the drink packs) that can have an impact on recycling.

OUTLETS
Creation of new flexible PE films, bin bags, irrigation tubes.

FIND OUT MORE
PE is the acronym for Polyethylene, indicated by the number 2 or 4 in the European classification of plastics depending on whether it is High Density (HDPE) or Low Density (LDPE).

Flexible plastic packaging is considered to be packaging that does not stand up and whose thickness is generally less than 100 microns.

RATE AND ECO-MODULATION

Material rate by weight 6.4, Flexible PE packaging: 36.08 €ct/kg

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<td>Integration of recycled material for PE</td>
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CITEO COMMITMENTS

Developing the recyclability and recycling of flexible packaging
In 2019, Citeo launched two calls for projects to improve recyclability for flexible plastic packaging:
• a call for projects to improve the recyclability of multi-material doypacks and find solutions that are compatible with recycling, for handles of films for grouping PE drink packs.
• a call for projects to design 100% recyclable PE packaging for the delicatessen sector.
• a call for projects to improve the outlets for recycling films in PE.

Citeo is also a member of the COTREP, the Centre for Resources and Expertise on Recyclability of Household Packaging in Plastics, which has been supporting packaging designers in the development of recyclable solutions for over 15 years.

2020 packaging rate - Not contractually binding

PS stands for Polystyrene, indicated by number 6 in the European plastics classification. PS-based containers can be lightened by injecting inflating agents into them; this is referred to as XPS, Extruded Polystyrene, or PSE, Expanded Polystyrene, which has the same material rate.

**SORTING INSTRUCTIONS**
Rigid plastic packaging excluding bottles and vials is not included in national sorting guidelines. They cannot yet be deposited everywhere in sorting bins, but it is possible in areas that have transformed their local collection and sorting system (referred to as Extended Sorting Guidelines).

**RECYCLING**
The tonnes of PS packaging collected as part of the extension are now recycled in Germany and Spain. In France, this channel is just starting to take off with the first experiments.

**OUTLETS**
The challenge is to find opportunities with added value; opportunities are currently very limited (flower pots and hangers).

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**RATE AND ECO-MODULATION**

Material rate by weight 6.5, PS rigid packaging: **38.85 €ct/kg**

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<td>Integration of recycled material</td>
<td>No bonus in 2020 20% bonus in 2021 for 50% rPS from household packaging</td>
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<td>Dark packaging in PS, not detectable by optical sorting, in particular containing carbon black</td>
<td>Loss of material at the sorting stage</td>
<td>Penalty level 1: 10%</td>
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**CITEO COMMITMENTS**

Develop the PS recycling channel: The Total group, Citeo, Saint-Gobain and Syndifrais, the French national union of manufacturers of fresh dairy products, are working to create a chemical recycling channel for polystyrene in France. Experiments are currently being conducted in Carling (57).

To find out more: [https://www.citeo.com/le-mag/442](https://www.citeo.com/le-mag/442)
The combination of 2 or more plastic resins in the same packaging is called “complex”. This combination is often required for product conservation reasons (to serve as a barrier) and/or for practical reasons. These properties are conferred by combinations of materials that are currently incompatible with a satisfactory recycling process.

SORTING INSTRUCTIONS
Plastic packaging excluding bottles and vials is not included in national sorting guidelines. They cannot yet be deposited everywhere in sorting bins, but it is possible in areas that have transformed their local collection and sorting system (referred to as Extended Sorting Guidelines).

RECYCLABILITY
This packaging has no recycling channel because it is by its very nature complex or the resource level is too low in a given region to justify setting up a channel. It may, however, be used to recover energy.

OUTLETS
Packaging without an existing recycling channel.

RATE AND ECO-MODULATION
Material rate by weight 6.6, Complex packaging or other resins excluding PVC: 41.63 €ct/kg

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CITEO COMMITMENTS

Improve the recyclability of plastic packaging materials
Since 2012, Citeo has launched numerous calls for eco-design projects in order to prepare the integration of this plastic packaging into national guidelines, by 2022. Solutions to reach 100% recyclable packaging are being studied, and include: the switch to single-material recyclable packaging.
This work continues with the new wave of calls for projects launched in 2019, in particular with R&D projects in the area of recycling: pyrolysis, chemical recycling, etc. which can be an answer to these types of packaging.

To find out more:
PVC is the acronym for polyvinyl chloride, indicated by number 3 in the European classification of plastics. PVC can be rigid or flexible, transparent or opaque, colourless or tinted, etc. It can be found in packaging such as bottles, vials, flexible and rigid films, boxes for greasy substances, boxes for pastries, certain wrapped trays for cold meats, blister packs etc.

**SORTING INSTRUCTIONS**
Plastic bottles and vials, including those containing PVC, are included in national sorting guidelines. However, only PET PE and PP resins have a recycling channel. All other types of packaging containing PVC are not included in national sorting guidelines. As part of the Extending Sorting Guidelines programme, all this packaging may be sorted and could become disruptive recycling packaging. This packaging will arrive at the sorting centre and must be disposed of as quickly as possible so as not to impede flows.

**RECYCLING**
This PVC packaging has no recycling channel. In addition, unlike other plastics, energy cannot be recovered from PVC for the production of solid recovered fuel (SRF), the most efficient waste-to-energy solution, because of the chlorinated compounds in it.

**RATE AND ECO-MODULATION**

| Material rate by weight 6.7, Packaging containing PVC: 48.57 €ct/kg |

<table>
<thead>
<tr>
<th>ACTION TAKEN</th>
<th>BONUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorting guidelines block</td>
<td>8% of full guidelines</td>
</tr>
<tr>
<td>Media awareness campaign</td>
<td>4%</td>
</tr>
<tr>
<td>Reduction at source</td>
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<table>
<thead>
<tr>
<th>ISSUES</th>
<th>MAIN POTENTIAL ISSUES</th>
<th>PENALTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark PVC packaging, not detectable by optical sorting, in particular containing carbon black.</td>
<td>Loss of material at the sorting stage</td>
<td>Penalty level 1: 10%</td>
</tr>
<tr>
<td>Bottle and vial in PVC</td>
<td>Packaging in 2020 in national sorting guidelines, but non-recyclable and non-recoverable</td>
<td>Penalty level 3: 100%</td>
</tr>
</tbody>
</table>

**CITEO COMMITMENTS**

- Promoting the recyclability of packaging:
  Since 2012, Citeo has launched numerous calls for eco-design projects in order to replace packaging containing PVC with recyclable packaging, via current or future channels, moving towards 100% recyclable packaging.
  To find out more: https://www.citeo.com/le-mag/428

- Working on the recyclability of blister packs:
  In the autumn of 2019, Adelphe, a Citeo subsidiary specialising in the pharmaceutical sector, will launch a working group dedicated to improving blister packs, the flagship packaging of the pharmaceutical industry, and mainly in PVC. Bringing together pharmaceutical companies, packaging producers, representatives of recycling channels and professional organisations, this group aims to improve the eco-design of this iconic packaging, and in particular its recyclability.
Wood and cork are found in packaging specific: certain cheeses, vegetable trays and fruits, shells, some ice cream, and wines and champagnes. The wood like cork stoppers are materials natural, mostly from managed forests sustainably and therefore perfectly renewable.

On the other hand, the Citeo tariff takes into account the end of life of packaging, and not the renewable origin of the material. The weakness of the deposit of these materials in household packaging (10,000 tons out of the 5 million tonnes of household packaging placed on the French market each year) does not allow not today to create a recycling channel dedicated in France.

Once sorted these wooden packages will join an energy recovery sector called CSR (Solid Recovery Fuel) which benefits from then their high calorific value. The wooden packaging can also join some industrial composting processes, still in the process of being little developed in France. Finally, reuse of these packages is common practice for households as well as for professionals, such as of the winegrowers and their cases of wine.

It should be noted that there is a solidarity sector for collect the cork from the corks. The caps are resold by the collection centres to the French cork manufacturers and the collection is transported to Portugal, which processes cork used as insulation. The money raised makes it possible to finance charitable actions or in favour of the sustainable development such as the planting of cork oaks in the south of France by Institut Méditerranéen du Liège.

**Rate and Eco-modulation**

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**Price Material by weight 7.1 Wood, cork, textiles and other materials:** 41.63 €ct/kg
STONEWARE, PORCELAIN, CERAMIC

EMBLEMATIC PACKAGING:

SORTING INSTRUCTIONS
This packaging is not included in national sorting guidelines. They will be sorted more widely as part of the Extended Sorting Guidelines.

RECYCLING
This packaging does not have recycling channels. In particular, they disrupt the recycling of glass. It cannot, however, be used to recover energy.

FIND OUT MORE
Porcelain, ceramics and stoneware have a melting temperature higher than that of the glass and deteriorate production quality.

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RATE AND ECO-MODULATION

Material rate by weight 7.2 Stoneware, porcelain, ceramic: 48.57 €ct/kg

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Any doubts about which material-based you should apply to packaging or pack?

To find the right material rate, use the decision tree below or go to the Interactive Guide available online, where you will find your answer in no more than five clicks.

**Decision Tree**

Does your CSU contain multiple packaging units?

Yes

What is the primary material in your 1st packaging unit?

Remember to test your other units as well!

Steel

RATE 1

Aluminium

RATE 2

Glass

RATE 5

Paper & Cardboard

Is it a brick pack?

Yes

RATE 4

No

RATE 3

* For these material categories, if your packaging unit / packaging is multi-material or multi-layer, check the breakdown by material to see whether you can apply the majority material rule (see p. 11).

** Mixture of two or more resins, mixture of a plastic resin with another material
Any doubts about which material-based you should apply to packaging or packaging unit?

What is the primary material in your packaging?

Is the unit made of…?

Wood, cork…

Plastic

Is it a bottle/vial?

Yes

No

Which resin is used for the body of your packaging?

Flexible or rigid?

Which resin is used for the flexible body?

Which resin is used for the rigid body?

CONSULT THE INTERACTIVE GUIDE