

## The Green Dot rates – what, why and how?

The Green Dot rates are the basis of the contribution paid by our members for the services we provide. How are the rates calculated? What are the basic principles? What developments do they undergo? And how will they evolve in the future?

### Why do you pay a Green Dot contribution?

#### Your legal obligations as a company

Companies that put packaging on the Belgian market are subject to a number of legal obligations. The so-called Extended Producer Responsibility (EPR) was introduced in the 1990s and obliges companies to contribute towards funding the collection, recycling and processing of their packaging waste.

In practical terms, you have three legal obligations:

**Take-back obligation.** Every year, you have to achieve a set recycling percentage for the packaging that you put on the market.

**Information obligation.** You have to inform the government annually of the nature of your packaging and the recycling percentages that you have achieved.

**Prevention plan.** You have to draw up a prevention plan setting out the measures that you take to reduce your quantity of packaging and the goals that you aim to achieve.

#### Contributing to a collective and efficient system

In order to organise producer responsibility for household packaging efficiently, businesses set up Fost Plus thirty years ago. Our sister organisation, Valipac, focuses on industrial waste.

If you become a member of Fost Plus, we deal with the **take-back obligation** as regards your household packaging for you. You use the collective system that we developed for collection, e.g. by means of the blue PMD bag. This allows us to attain the mandatory recycling percentage for your company.

Through your annual declaration, you also fulfil your **information obligation**. On the basis of the information from the declarations made by our members, we can inform the government of the nature and quantity of packaging put on the market.

At the moment, you cannot yet call upon Fost Plus to prepare the **prevention plan**. You can draw up a prevention plan yourself or use those provided by the federations.

#### Green Dot contribution finances Fost Plus's activities

The contributions that you as a company pay are used to cover the costs that Fost Plus incurs to collect, sort and recycle your packaging and for support activities such as communication and raising awareness, quality control and monitoring. So the Green Dot is not a tax on your packaging.

Moreover, as a company you are not obliged to join Fost Plus. You can set up your own system to collect your packaging and then look for a recycling solution yourself. However, in practice this is often not feasible and not very efficient economically.

By doing this at national level and for a far larger volume of packaging, Fost Plus is able to organise this in a cost-effective manner. It is also more convenient for consumers. Thanks to the door-to-door collection of paper-cardboard and PMD, as well as the extensive bottle bank network, the system is very accessible and the collection level is very high. This is an important factor in our success: we achieve one of the highest recycling percentages in Europe (95%) at a relatively low cost per inhabitant.

## What are the basic principles behind the Green Dot?

- The basic principles for the calculation of the Green Dot rates were validated by the Fost Plus Board of Directors and are also part of our accreditation. The rates are calculated every year in accordance with these basic principles when the budget is drawn up and then approved by the Board of Directors in June. They are sent to the Interregional Packaging Commission together with the calculation method. Finally, the General Assembly confirms the budget and the Green Dot rates.

### A specific cost applies for each material

The Green Dot rates are calculated on the basis of the real cost deficit for each material that is recycled. This means that for each material we compare the actual costs and revenue with the volumes put on the market. This results in a Green Dot rate per material. On the basis of these rates, our members pay a fair and proper contribution based on the materials that they use for their packaging.

### Eco-modulation promotes recycling

The Green Dot is an essential lever to achieve a circular economy for packaging. A guiding eco-modulation principle allows us to promote the use of easily sortable and recyclable packaging. The more difficult packaging is to recycle, the higher the rate that you pay for this packaging. The highest Green Dot rate applies for packaging that cannot be recycled.

### Annual budgeting

The Green Dot rates are reviewed yearly on the basis of a forecast of the anticipated quantities, costs and revenue for the coming year. We estimate the volumes that will be put on the market and the volumes that we will collect, the trend in materials prices and the trend in costs.

This estimate is not always easy to make. Both the revenue and the costs depend on developments on international markets, macro-economic factors such as inflation and even geopolitical events. Any surpluses and shortfalls are incorporated into the rates for the following year.

## How is the Green Dot calculated?

In 2022, Fost Plus's total budget amounted to just over EUR 285 million. This mainly covers the costs for the selective collection, sorting and recycling of household packaging. The revenue from the sale of some materials is, of course, also included on the income side. The difference between the two is financed via the Green Dot contribution.

The calculation principle for the Green Dot rates can be presented simply as follows:

$$\frac{\text{Costs (for collection and sorting)} - \text{Revenue (from recycling)}}{\text{Volume (of packaging material put on the market)}} = \text{Green dot Rates}$$

This principle is applied per packaging material that is recycled and results in a separate rate per material, which is recalculated yearly.

### Collection and sorting costs

The largest share of the Fost Plus operating budget is spent on collecting, sorting and recycling packaging. In very simple terms, these are all the costs incurred to take the materials from peoples' homes to our recycling partners. This includes the door-to-door collection of PMD and paper-cardboard or the installation, maintenance and emptying of the bottle banks. In addition, the PMD sorting centres are paid for their activities.

In practice, most of these activities are carried out by intermunicipal organisations or private waste companies, but they are financed by Fost Plus via long-term contracts. Fost Plus also pays a contribution to the intermunicipal organisation or the local authority that runs the recycling park for the packaging materials that are collected via the recycling park.

Finally, Fost Plus's general operating costs are taken into account. These include the costs of communication and raising awareness as well as the general management of the organisation (finance, HR, management, etc.).

### Exact cost allocation

Activities that can be linked to one specific material are allocated in full to that material. For instance, the costs for the installation, maintenance, rental and emptying of the bottle banks are taken into account in full in the Green Dot rate for glass, just like specific quality controls of the glass collected or awareness actions aimed at keeping the bottle bank sites clean and tidy.

For PMD this allocation is a little more complex, because it involves various materials that are collected together and sorted. But here too, the costs are divided up per sorted material. We bring in an external auditor for this, who divides the costs among the various PMD materials on the basis of set criteria. As part of this exercise, for example, every year the auditor asks the PMD sorting centres which machines and people are used for which fraction. The cost of an optical separator used to sort packaging made of polypropylene (PP) is allocated to PP, the cost of a sorter who is responsible for checking the drinks cartons is included in the Green Dot rate for drinks cartons. The space taken up by each material in the refuse collection lorry and on the sorting belt is another important parameter.

Indirect costs that cannot be clearly allocated to one material or one group of materials, such as general awareness raising, overheads or monitoring costs for the local authorities, are allocated to the various materials on the basis of predetermined criteria and objectively measurable cost drivers.

### Revenue from the sale of materials

In addition to the costs, the revenue from the sale of the materials is also taken into account. The materials that we collect and sort are pressed into bales and sent to specialised recycling companies. The prices that we obtain for these bales depend on a number of factors.

Materials which have a fully-fledged recycling and sales market, such as aluminium or transparent PET bottles, are the most sought after. After all, recycling companies can sell the recyclate to industrial companies that then use it to make new packaging or objects.

For other materials, such as flexible packaging or certain hard plastics, the recycling market is still developing and the sales market is rather limited. Consequently, Fost Plus does not obtain high prices for these materials and in some cases even has to pay the recycling company to process them.

In addition, the quality of what we supply plays an important role. The purer the materials, the higher the price. Fost Plus has a particularly good reputation among recycling companies in this respect. This is due, among other things, to our efforts to increase awareness among the general public, the extensive optimisation of our collection scenarios and the investments in new technologies for our sorting centres.

Some packaging materials even bring in more than it costs to collect and sort them. The Green Dot rate for these materials at least covers their participation in Fost Plus's indirect costs.

## Volumes put on the market

The volumes of a particular packaging material put on the market also influence the Green Dot rate. A fixed cost that is spread over a relatively large volume of packaging will have less impact than when the volume involved is relatively small.

We take the trends that we see in the declarations submitted by our members, trends in the packaging market and the legislative context as a basis to estimate these volumes. We also question our members regularly about expected developments in the packaging that they use.

## One rate for packaging that cannot be recycled

A single rate applies for packaging that cannot be recycled. This is at least double the highest rate for recyclable materials. It is a financial incentive for companies to switch to recyclable alternatives in light of their commitment to make all single-use packaging recyclable by 2025.

Any additional income from the contribution for materials that cannot be recycled is divided among the other materials in line with their recycling percentage.

## How will the Green Dot rates evolve in the future?

**The circular economy is in full swing. We see new technologies and applications emerging every day. And that is a good thing, because it means that we can recycle more and more. It also means that the Green Dot rates will continue to evolve over the coming years. In addition fluctuating material prices, macro-economic factors and new legal provisions have a major impact on the rates. We describe a number of the main drivers below.**

## Collection scenarios

Since the New Blue Bag was introduced, we have been collecting more and more materials for recycling. This introduction went hand in hand with major investments in new sorting centres and recycling capacity that push up the costs. As we collect more, the logistics and transport costs are also rising. These are necessary investments for the future, which will allow our members to continue to comply with ever more stringent legislation.

The expansion of the PMD fraction sometimes has positive consequences for other fractions as well. For example, the adaptations for coffee capsules that we have made in the sorting centres mean that we can now sort fine aluminium as well. That immediately led to an adapted rate for this material, which is no longer considered non-recyclable.

New or adapted collection scenarios for a number of specific flows have also emerged in the past few years, again resulting in separate Green Dot rates. These include packaging for engine oil, chemical and corrosive substances, which are considered to be Small Hazardous Waste (SHW) and which is collected via the recycling parks. EPS and cork are also collected via the recycling parks and a separate Green Dot rate applies. As with all other flows, the basic principle here is that the rate is always calculated on the basis of the cost deficit.

## Market developments and macro-economic trends

Material prices are subject to the law of supply and demand. Moreover, this is a global market which is strongly influenced by the general raw materials prices. Consequently, it is difficult to forecast the prices. Although the demand for recycled materials is continuing to grow, in practice this does not always lead to rising prices for these materials.

In addition, macro-economic factors have a significant impact on the cost side. The high inflation seen in recent years, for example, has resulted in rising energy prices and wage costs, which also make transport and logistics more expensive. Here again, it is very difficult to forecast what we should expect in the coming years.

## **Legislation**

Finally, developments in the legislation can also entail extra costs and rising Green Dot rates. This may involve the introduction of higher recycling goals for certain materials, but also extra obligations that are imposed in the context of our (re-)accreditation. These may be extra costs to pay for the activities undertaken by local authorities and intermunicipal organisations or the introduction of higher collection frequencies for certain materials.

With the advent of the new European *Packaging and Packaging Waste Regulation* we expect an additional differentiation in certain material categories on the basis of recyclability and recycled content.

## **Conclusion**

### **A proper and fair contribution for each company**

Fost Plus applies the cost deficit principle, whereby we calculate the exact costs and revenue for each material and allocate this to that material via the Green Dot rate. This is the best way to ensure that each company pays a fair and proper contribution for the collection, sorting and recycling of its packaging.

### **Investing in sustainability is rewarded**

The circular economy is developing rapidly. We expect the Green Dot rates to continue to evolve in the coming year as well. However, we remain convinced that opting for sustainable and easily recyclable materials will be worthwhile in the long term. Our members can also come to us at any time for advice on this matter, so that they can make the right choice for the future.