

# LE MAG DU TRI



ON YOUR MARKS...  
GET SET...  
RECYCLE!

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Le  
Premier  
geste  
qui  
Compte!

\*It's the first gesture that counts!

# SORTING PACKAGING AT HOME

**Recycling is only possible if there is sorting at the source. This means that you are the first link in the chain!**

Here are the first stages in the proper sorting of the recyclable household packaging that goes into the yellow containers:

## 1. KNOW THE SORTING INSTRUCTIONS



 YELLOW CONTAINER



Yellow container

OR



underground point

OR



above-ground point

### DID YOU KNOW?

**Why are the yellow containers locked, and why do they only open a certain amount?**

It makes it possible to avoid the containers being “polluted” by bags of non-recyclable household waste or large waste items that are not household packaging. In this way, we can maintain the quality of the sorting.

You will find detailed sorting instructions in the waste guide at [www.sma.mc](http://www.sma.mc).



## 2. PUT LOOSE RECYCLABLE WASTE INTO A RECYCLING BAG

## 3. EMPTY THE RECYCLING BAG INTO A YELLOW CONTAINER OR A VOLUNTARY DROP-OFF RECEPTACLE

If your building has a waste room with a yellow container, you can empty your recycling bag into it.

There are also voluntary drop-off receptacles (PAVs) that have terminals or containers into which you can throw your recyclable household packaging. You can find the PAV card on the SMA website.



SOCIÉTÉ MONÉGASQUE  
D'ASSAINISSEMENT

 You can find useful information at : [www.sma.mc](http://www.sma.mc)

# FREQUENTLY ASKED QUESTIONS

## I DON'T HAVE A YELLOW CONTAINER IN MY BUILDING / HOW CAN I OBTAIN A YELLOW CONTAINER FROM MY BUILDING?

Let your building managers (the Management Agents) know, so that they can contact SMA and obtain the containers. NB: The government is responsible for the cost of providing rolling yellow and green containers.

## WHAT IF THE CONTAINERS ARE ALWAYS FULL?

Let SMA know (8000 20 40), and we will come and see whether it's possible to add yellow containers or replace the household waste containers with yellow ones.

## WHAT IF MY BOXES WON'T FIT IN THE YELLOW CONTAINER?

You can fold large boxes and leave them next to the yellow container the evening before the collection day.

## I'M NOT SURE ABOUT THE INSTRUCTIONS. CAN I HAVE SOME TIPS ON HOW TO REDUCE MY WASTE?

You can call the Prevention and Recycling Department at SMA.

 **N° Vert** **8000 20 40**

CALLS ARE FREE OF CHARGE

## MORE INFORMATION

A household's rubbish bins are mostly filled with recyclable waste: almost 40% of it can go into the yellow bin (paper, boxes, steel and plastic); 12% is glass waste (jars, bottles and pots), which goes into the green bin; and approximately 10% is special household waste, including electronic equipment and textiles, which can go into the dedicated receptacles or to the recycling centre.

The remainder consists of putrescible waste (peel and food waste (approximately 30%)), sanitary textiles (nappies, tissues, paper towels, etc.) and other non-recyclable waste (source: ADEME, 2018).

Much of this, including food waste, plastic packaging and textiles, can be avoided!

# YELLOW BIN COLLECTIONS

*You've thrown your waste into the yellow container, and now SMA's collectors come to empty it into a dumper truck dedicated to recyclable household packaging. This truck then empties its contents at the waste collection centre in Cannes la Bocca.*



## INTERVIEW WITH JEAN-PIERRE GLORIA, an SMA collector since 2006

### HOW LONG HAVE YOU BEEN DOING THIS JOB?

**J-P G :** I joined SMA in 2006. I've worked in all the collection jobs, including illegal dumping, I've been collecting yellow containers since 2013.

### CAN YOU DESCRIBE A TYPICAL DAY FOR US?

**J-P G :** I arrive at five in the morning and begin my shift sector by sector.

I organize my collection from the various addresses depending on the district. The aim is not to go along the same streets several times. This can be done because I know Monaco's streets and the "rhythm" of the Principality well. For example, I know that companies begin working at around 8:30 in Fontvieille (where the yellow containers are collected on Monday morning),





so we pass by at that time. Before that, we collect from a different district. People generally play the game well and put their containers out on the right day. This happened less at the start, but they've got used to it now.

I return to SMA at 9:00 for a briefing, when the team leader gives out information to all the collectors if there's something new (new addresses to collect from, for example) or if there other specific things need to be done. Then I get back in the truck to finish my shift, which ends at around 12:00.

## WHAT PROBLEMS DO YOU COME ACROSS WHILE YOU'RE WORKING?

**J-P G :** There are traffic problems, depending on the time. People often use their horns because we have to block the street to collect the containers. But the traffic problems are limited because of the way collections are organized (starting at 5:00). We have to stop for longer at some addresses where there are a lot of containers, and this can cause traffic issues, but the fact that we start at 5:00 limits this type of problem.

Another difficulty is that there are sometimes bags on the ground and mixed waste, above all in enclosed public areas. In these cases, we need more time, because we have to collect the bags and in some cases put them in other containers because they are not recyclable waste bags. As far as the door-to-door collection is concerned (bags from homes) I'd like to say that mostly there are no problems with impoliteness. It works quite well. The inhabitants and security guards pay attention.

## HAVE YOU NOTICED ANY CHANGES IN THE WAY USERS BEHAVE SINCE YOU STARTED THIS JOB?

**J-P G :** I've noticed that the numbers of yellow containers and the amounts they contain have increased a lot in recent years. In 2013, we went to the waste collection centre to empty the truck twice a week. Then it was three times. Now it's every day. We now have a driver who only does this.

As far as the collection rounds are concerned, there are now two of us in the truck (a driver and a loader), but the driver leaves the truck to help empty the containers when there are lot of them.

I also think that sorting instructions are better understood now. There are fewer polluted containers proportionately. And then, of course, we know the addresses, there are places where we know we need to pay more attention. Unfortunately, it's sometimes only when the container has been tipped up that we realize there have been issues with the sorting. We hear the sound of glass or loud noises, for example, and we know immediately that it's not household packaging.

There are places where sorting is done very well, and others where it's less good. In this case, we tape up the containers, and the team from the waste prevention and recycling department is informed so that they can do some awareness raising.

## REJECTION OF COLLECTIONS

When the yellow containers are collected, the collector must carry out a visual check of the container by opening the lid to verify that the container has not been "polluted" by non-recyclable waste (black bags, glass, rubble, window glass, chrome appliances, etc.). This check-up can only be done on the top surface of the container, because the collector cannot put his or her hands into the container for safety

reasons. If significant pollution of the container is noted at first sight, the collector closes it and seals it with tape. This means that it will be collected with the household waste. If the collector does not notice anything, or if he or she only notices minor sorting errors, he or she empties it into the truck, which is then taken to be emptied at the sorting centre in Cannes La Bocca when it is full.

# THE SORTING CENTRE

The yellow containers are full of different materials, all mixed together. Once they have been collected, the contents of the yellow containers are taken by SMA to the SMED sorting centre in Cannes, which is run by Paprec. At the centre, the packaging is sorted based on the various categories of material (cardboard, food cartons, steel, aluminium, PET plastic, PEHD plastic, etc.).

## THE SORTING LINE

Various types of sorting are carried out mechanically: sieving, ballistic, magnetic and optical, plus manual sorting at the end of the chain in order to check the quality of the sorting and correct any errors.



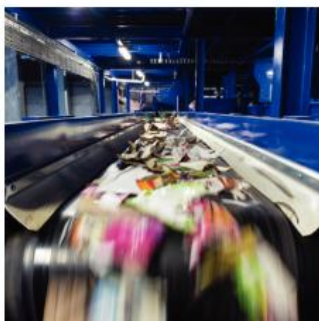
1. A loader feeds the sorting line



2. The waste is separated according to size



3. The waste is separated according to shape



4. The waste is separated according to material (plastic, cardboard, steel)



5. Sorting personnel check the quality of the sorting and correct errors by hand



6. The waste is put into bales according to the type of material and the bales are weighed, labelled and stored while they await removal to recycling facilities





A total of 11 groups of materials are separated and sent to different recycling sites:



## METALS

Steel  
Aluminium  
Small aluminium containers



## PLASTICS

Clear PET (for example, transparent bottles)  
Coloured PET (for example, coloured bottles)  
PE-HD (for example, opaque containers for laundry detergents)  
PP, PS (for example, plastic trays)  
Polymer films (for example, food film)



## PAPER

NPM  
(Newspaper/Periodicals/Magazines)



## CARDBOARD

Cardboard packaging  
Tetrapak packaging

## CHARACTERIZATION AND REJECTION RATES

Once a month, the sorting centre takes a sample of waste from yellow containers from the Principality of Monaco. Each type of waste from the sample is sorted according to material: plastic, steel, metal, cardboard, food containers, etc. Waste that should not have been put into the yellow container (like glass, bags containing household waste, toys or a bottle with water still in it, for example) are put into a separate bin. This is the “reject” bin. A ratio is then calculated




between the weight of the reject bin and the total weight of the sample taken, which gives the rejection rate. The overall approach that consists in the evaluation of this rejection rate is called “characterization”.

**In 2018, Monaco’s average rejection rate for the year was 17.6%.** In other words, 17.6% (in weight) of a typical yellow bin from the Principality should not have been thrown into the yellow container.

# RECYCLING MATERIALS

The bales of materials are sent to different places. Each type of material has its own recycling facility!

## PLASTIC PACKAGING

Category	Recycling locations	Resources saved by recycling	Items obtained from recycling
Clear PET	 FPR : Limay (78)	Oil, energy	Bottles, T-shirts
Coloured PET			Fleece clothing, filling for du-vets and pillows
PEHD, PP, PS	 Paprec Plastique : Chalon-sur-Saône (71)		Hoses, watering cans
Film	 Machaon : Châlons-en-Champagne (51)		Bags, sachets

280,7T



=



468 398

280.7 tons of transparent plastic bottles were recycled in Monaco in 2018, enabling 468,398 teddy bears to be produced.

34T



=





38 961

34 tons of PE/PP/PS rigid plastic were recycled in Monaco in 2018, enabling 38,961 watering cans to be produced.

Source of conversion rates: CITEO





# METALS

Category	Recycling locations	Resources saved by recycling	Items obtained from recycling
Acier	 ArcelorMittal : Fos-sur-mer (13)	Iron ore, coke, water, energy	Cans, automobile parts, household appliances, pétanque bowls
Aluminium		 Alunova : Bad Säckingen	Furniture, bicycles, scooters, cables
Small aluminium			



25.5 tons of metal packaging were recycled in Monaco in 2018, enabling 331 dishwashers be produced.

# CARDBOARD PACKAGING AND PAPERS

Category	Recycling locations	Resources saved by recycling	Items obtained from recycling
Cardboard packaging	 Laveyron (26)	Trees, water, energy	Paper, cardboard, shoeboxes, egg cartons
Paper	 Rentería (pays basque)		



212.5 tons of cardboard packaging were recycled in Monaco in 2018, enabling 1,686,281 shoeboxes to be produced.



8.5 tons of packaging for liquid food products (bricks) were recycled in Monaco in 2018, enabling 14,857 the rolls of kitchen paper to be produced.

Source of conversion rates: CITEO

# MORE INFORMATION

## REDUCTION AT THE SOURCE: «THE MAG CHALLENGE»

### The waste that pollutes the least is the waste you don't produce!

It's not always an easy matter to reduce waste, because a lot of the products available to us are already packaged, and we have the feeling we don't have a real choice.

There are ways not to produce certain types of waste, however. Some families even manage only to fill one small bin in a year.

There's no need to set over-ambitious targets from the outset. The important thing is to make a start. Here's a small challenge that's within everyone's reach, although these are just a few examples.

There are many actions we can take:

✓ I REFUSE PRODUCTS I HAVE NO NEED FOR

(fast food sauces, plastic lids for salads, sugar with my coffee, paper and plastic bags, etc.)



I STOP USING DISPOSABLE GLASSES.  
I TAKE A CUP WITH ME



I TRY OUT COMPOSTING OR VERMICOMPOSTING



I GO TO MY GROCER'S WITH A REUSABLE CONTAINER



I REPLACE BOTTLES WITH A FLASK



I PRIORITIZE USED PRODUCTS



I REPLACE SHOWER GEL WITH UNWRAPPED SOAP



I ORGANIZE A PARTY OR A PICNIC WITH NO DISPOSABLE TABLEWARE



AT CHRISTMAS, I WRAP WITH FUROSHIKI  
(see opposite)



## DISPOSABLE



## SUSTAINABLE

- KITCHEN ROLL ●
- PLASTIC GLASS ●
- PLASTIC BAG ●
- PLASTIC BOTTLE ●
- LIQUID SHAMPOO ●
- PLASTIC LIDS ●
- PAPER NAPKIN ●
- PAPER GIFT WRAP ●
- CARDBOARD TUB ●
- COTTON MAKE-UP REMOVER ●

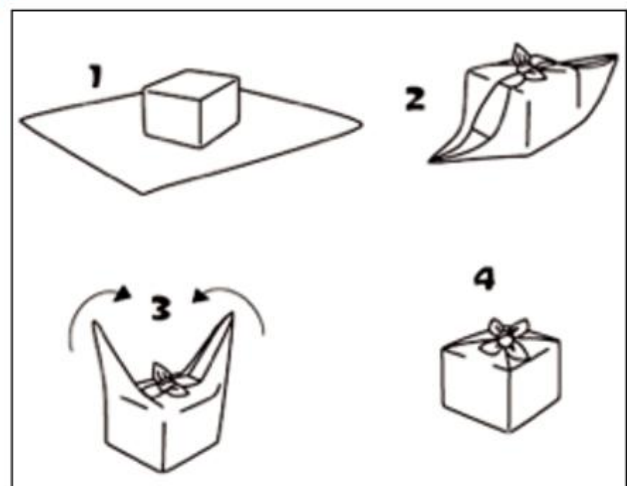
- FABRIC
- FLASK
- SOLID SHAMPOO
- WASHABLE COTTON
- COTTON BAG
- FABRIC NAPKIN
- REUSABLE CONTAINER
- WASHABLE LIDS
- CLOTH
- ECOCUP OR CUP

Answers available at [www.sma.mc](http://www.sma.mc)

## THE SUSTAINABLE WORKSHOP

**Do you want to try a No-Waste Christmas or birthday? Use a few simple tricks to limit your waste!**

Paper gift wrap is a major source of waste at holiday time. It's paper that is produced to be torn and then thrown away. Try Furoshiki. This Japanese way of wrapping presents in a fabric square makes it possible to replace disposable wrapping paper with elegant, ecological wrapping (see an example of folding opposite).



For your holiday meals, also think about using washable tableware and limiting disposable tableware as much as possible.

Also, don't forget to sort your wine and champagne bottles in the green bin. Glass can be recycled an infinite number of times, whereas a bottle left in the environment takes approximately 4,000 years to decompose.

# GLOSSARY AND SIGNAGE

## GLOSSARY

### **BIODEGRADABLE:**

A product is biodegradable if it decomposes in a favourable environment (temperature, humidity, oxygen, etc.) due to microorganisms (bacteria, fungus, algae), and within a brief period of time in relation to a human lifetime. A material is considered to be biodegradable if it is 90% biodegraded (conversion into carbon dioxide, water and biomass) after no more than six months.

### **SORTING CENTRE:**

A place where waste from separate collections is taken. The waste is sorted by material, packed and stored before being sent to recycling centres to be recycled.

### **RECYCLING CENTRE:**

A place where waste from sorting centres undergoes transformation processes to be turned into new objects (recycling).

### **COMPOSTABLE:**

A product is compostable if it satisfies the criteria of standard NF EN 13432, which are defined as using an industrial composter. The material must:

- comply with a total period of fragmentation into biodegradable particles (3 months) and an established particle size (< 2mm)
- have very low levels of heavy metals (compost quality)
- have stable physical and chemical parameters during the composting cycle
- have no harmful effects on the composting process

All compostable products are biodegradable, but the reverse is not necessarily true.

### **EMBALLAGE RECYCLABLE:**

Packaging that can be used to produce a new item.

### **BIOSOURCED MATERIAL:**

A biosourced product is partly made of vegetable substances (corn starch, sugar cane, malt, etc.), and is not necessarily 100% biodegradable. Biosourcing refers to the origin of the materials used to make a product, and not to its end of life (like biodegradability).

### **RECYCLED MATERIALS:**

Material produced from items destined to be recycled.

### **RECYCLE:**

The act of recycling materials.

### **RECYCLING:**

Recycling is a method of treating collected waste. The waste is reintroduced into production cycles for the manufacture of similar new products. Recycling makes it possible to reuse materials in a product that has reached the end of its life cycle.

### **SORTING:**

The manual or mechanical separation of different materials.

### **REDUCE WASTE:**

Becoming aware of the fact that we produce and own our waste, and limiting the amount of it as much as possible, by avoiding highly packaged products, making your own products, using sustainable rather than disposable products as much as we can.



# THINGS WE HAVE HEARD ABOUT LOGOS

Some brands use pictograms on their packaging, but what do they mean?



THIS WASTE IS RECYCLABLE

FALSE

The “green dot” logo means that the manufacturer contributes to CITEO, which is responsible for reducing the impact of packaging on the environment. The manufacturer makes a financial contribution towards the collection, sorting and recycling of packaging. Under no circumstances does this symbol mean that the product is recyclable.



I MUST THROW THIS PACKAGING INTO A BIN

TRUE

This logo encourages respect for the environment on the part of consumers. The tidyman indicates that the product must be thrown away into a bin and not into the environment. This has no connection with the ecological characteristics of the product.



THIS WASTE IS RECYCLABLE

TRUE

The Möbius circle or loop is a universal logo to indicate that a product is technically recyclable. It is a technical feature of the materials. Recycling can be effective if the user first places it in the right bin.



I MUST NOT THROW THIS WASTE INTO MY HOUSEHOLD WASTE BIN

TRUE

The “crossed out bin” pictogram appears on electrical and electronic products, batteries and accumulators. This type of waste must not be thrown into the grey bin (non-recyclable waste). It must be collected separately, because it is harmful for the environment, or must be taken to a rubbish dump.



THIS WASTE IS 20% RECYCLABLE

FALSE

Where a percentage is indicated in the middle of the logo, it identifies the proportion of recycled materials in the product. It does not guarantee that it can be recycled again.



BACK NUMBERS  
OF OUR MAG DU TRI  
ARE ALL AVAILABLE  
AT SMA.MC

 **N° Vert** 8000 20 40  
CALLS ARE FREE OF CHARGE



12 avenue de Fontvieille  
BP 498 - 98012 MONACO Cedex  
sma@sma.mc - sma.mc