ZERO WASTE 2030

Guide to ensure good resource use and seamless waste operations

For you who work on board



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WELCOME TO OSLO AIRPORT!

You are one of over 60 airlines that operate at Oslo Airport. We are happy to have you here!

We at Avinor are concerned with reducing our environmental impact and want to share knowledge and best practices with those who operate at Oslo Airport. With this guide, we would like to give you the tools you need to take part in our zero waste mission, while doing something good for the environment and setting a good example for your employees and passengers.

Here you will find useful information on how you can reduce the amount of waste produced in flight, and take care of the resources that already exist.

We have also included information on source separation at our airport.

We hope that this guide will be of help to you and your airline, and that you will be inspired to take part in our zero waste commitment.

Together we can work toward a more sustainable circular future!

Avinor Oslo Airport

20.06.2023



OUR ZERO WASTE AMBITIONS

HORIZON 2030

1

We are working for that by 2030 in all of Oslo Airport...

- Zero usable items are discarded
 This includes avoiding discarding source separated.
- Zero food waste
 Edible food surplus must be sold at a reduced price or given away.
- Zero disposable items used Disposable items within offices, workplaces and for inperson dining in serving locale is not used, neither single use solutions in other contexts (pallets, cleaning papers etc.)
- Zero incorrect sorting
 Surplus items that cannot be treated with life-extending measures must be source separated correctly
- Zero vision for residual waste
 I.e. 100% for reuse or material recycling of what is suitable and/or possible to sort out. What is not suitable for material recovery aims to be continuously reduced and in the long term moves towards zero.

2

Reduce the total amount of waste related to daily operations by 50% by 2030, compared to 2022.

3

Ensure efficient, seamless waste management at the airport and create a culture of waste prevention and reuse.

4Move higher up on the R-ladder.

HORIZON 2030+

There is no more waste, only resources in circulation.

THE R-MODEL

We use the international R9 model as a basis. It shows what we can do with resources from worst (R9) to best (R0).



RO. Refuse

Make product redundant by abandoning its function, or by offering the same function by a different product or service.



R1. Rethink

Make product use more intensive (eg: sharing).



R2. Reduce

Increase efficiency in product manufacture or use by consuming fewer natural resources and materials.



Re-use of a product which is still in good condition and fulfils its original function.



R4. Repare

Repair and maintenance of defective product so it can be used with its original function.



R5. Refurbish

Restore an old product and bring it up to date.



R6. Remanufacture

Use parts of a discarded product in a new product with the same function.



R7. Repurpose
Use a redundant product or its parts in a new product with different function.

LIFETIME EXTENSION



R8. Recycle
Recover materials from waste to be reprocessed into new products, materials or substances



R9. Recover

Recover waste as energy by incineration. This is the treatment of all cabin cleaning waste in Norway.

It may be that not all of these are relevant to your operation, but we still encourage you to think about moving up the ladder. Source separate instead of throwing in residual waste. Reuse and repair rather than throw away. Rethink your daily operation with waste minimizing in mind.

MINIMIZING RESOURCE USE

What you have not bought and what you have not produced has the most to say!

Everything that is produced becomes a certain amount of waste at the end. By smart procurement and production we can save natural resources. Here are some tips for how you can reduce cabin waste in your flights.



A cosy cup and reusable water bottle for your crew

It all starts in the work culture. Encourage those who work on board to avoid single use by gifting them a cosy and practical thermo-cup and a reusable water bottle.



Handing out giveaways to only those who want it

We send tonnes of never used in-flight giveaways to incineration every month. Check in with passengers if they need that headset, toiletries, blanket or chocolate!



Less packaging

We encourage you to explore ways to procure with less packaging. Cutleries wrapped in plastic, with food packed in plastic, together wrapped in both plastic and paper shouldn't be the norm. Don't be afraid to challenge your suppliers to rethink their production. How you buy in matters!



Avoid single use serving

We know that washing cups and plates is not feasible in cabin serving, but asking passengers if they need napkins, sugar and such is feasible! Remember that switching to biodegradable single use items do not make a difference as they are incinerated with other residuals. Best to avoid using them wherever it is possible.



Encourage passengers to have a thermo-cup

Sipping a cup of coffee from one's own cup is cosy, holds warmer longer, sealable, and prevents waste too. Encourage your passangers to bring a re-use cup, or sell your own design thermo cups as many cafes already do. It is a great branding opportunity and contribute to less single use cups.



Pre order for in-flight meals to reduce food waste

Several arlines have introduced this practice to be able to better plan food production for on-board serving. In the same time passengers can have an enhanced experience with food being tailored for their needs. Pre ordering can either be integrated in the booking process or offered as post booking service.

SOURCE SEPARATION AND RECYCLING

Think of yourselves as resource managers. How you handle waste on board matters!

Avoiding the creation of waste is the best we can do. Proper source separation is the second best solution. We know that cabin space limits waste collection possibilities. If you have space for only one thing beside residuals and CAT1 food waste, we recommend to source separate drinking cans/bottles.

Here is an overview of disposal possibilities that are available for flights at Oslo Airport, and a guide for what should and should not be thrown into different fractions.

	Should throw in	Should not	
Cans and bottles	Plastic drinking bottlesMetal drinking cans	Single use cupsPlastic cupsGlass	
Plastic foil	Soft, clean plastic foil	 Hard plastic Plastic bottles Mixed materials that are only partially plastic 	
Paper	Clean paper of all sortsCardboard	Greasy / wet papersMixed materials that are only partially paper	
Glass	Glass bottles and jars	Parfume bottles	
Residual waste	 Everything that cannot be reused or source separated, eg. mixed materials 	Cans and bottles, not even if they are in a bag.	



Please note that after-separation of waste is not available in Norway.

Items will only be recycled if you source separate.



The cleaning company cannot open waste bags to take out other bags. Please keep your source separated waste in separated bags.

International solid waste (CAT1 food waste) is handled separately by the catering company you have agreement with.

CABIN WASTE STATISTICS

750 TONS

of cabin cleaning waste was collected at Oslo Airport in 2022.

This is **15%** of all the airport's operational waste.

ONLY 5% OF ALL CABIN WASTE IS SOURCE SEPARATED

A waste composition analysis on residuals conducted in august 2022 found that around

40% OF THE RESIDUAL WASTE IS RECYCLABLE.

Throwing recyclables in residuals is a significant resource loss.

Residual waste 95%

Paper



In Norway, residual waste does not go through after-separation. This means that residuals - with all the recyclables that are in it - are incinerated for energy recovery. Although this might sound good, it is the worst treatment for resources (see: R-modell, page 3). Thus we want as much as possible to go to reuse or material recycling instead, because...

...RECYCLABLES INCINERATED = MATERIAL VALUE LOST

Incinerated resources will not be turned into new products. This means that raw materials from nature have to be extracted for production.

WHAT IS IN CABIN CLEANING RESIDUAL WASTE?



NOT WASTE

Around 3% of the waste was perfectly usable goods like blankets and give away items.



FOOD WASTE

5% of the residuals (based on volume) was food waste.



RECYCLABLES

We found 28% plastics, 7,5% paper and 1% metals, all of which could have been recycled.

Check out <u>IATA Cabin Waste</u>
<u>Handbook!</u> It offers in debth information on cabin waste globally, and great advices on how to approach it.

GENERAL GUIDE REGARDING WASTE AT THE AIRPORT

By following some simple advice, we can together ensure seamless operation at the airport, which benefits everyone.

There are over 300 companies working at Oslo Airport. What you do affect others.



01

Don't leave waste on the ground, bridge, or other places!

Mismanaged waste bags left outside are a significant problem at the airport. They obstruct airside traffic, increase the risk of bird strikes and pose health and safety risks. It is the cleaning company's responsibility to transport cabin waste, but they can only do this job if they are notified in time, either by you, by the cockpit, or by your ground handling.



Check your waste routines

To avoid your waste ending up in undesired locations, make sure you know all the routes the waste can take. Are there guidelines in place for how to handle waste that is not in the cabin, or on routes where cleaning is not scheduled? Are these guidelines followed? Check and revise your routines and make sure that the cabin crew, cockpit, the ground handling and the cleaning company all have clarity over their tasks regarding waste handling.



03

Practice good bag filling

Don't overfill bags while you collect waste during the flight, as they can cause problems during transport. To ensure recycling, don't stack source separated waste bags in one bag, and don't pour residuals on top of source separated waste.



Use see-through waste bags

The branch standard in Norway does not permit the use of black or other colors that hides the waste. To ensure good handling and quality controll, only see-through bags are to be used.



Just ask!

We would like you to have all the information you need, as well as hear your feedback. Are you wondering about something? Or do you have an idea that you want to share? Get in touch!

Contact

Cabin Cleaning:

Operation Central Sodexo

+47 64821311

Ask them about: Cabin cleaning, waste transport, urgencies Availability: 0-24

Sissel Rogstad (Site manager - Corporate Services)
Ask her about: General questions, non-urgencies

Sissel.ROGSTAD@sodexo.com

Daily waste operations:

Morten Børve (Stena Recycling)

✓ morte.borve@avinor.no

(+47 98157248

Ask him about: Practicalities about waste disposal Availability: Mon-Fri 08-16:00

Zero Waste project:

Rita Jonyer (Avinor Oslo Airport)

✓ rita.jonyer@avinor.no

(+47 40975306

Ask her about: The project; collaboration; this guide Availability: Mon-Fri 08-16:00

Airport Operations Center (APOC)
Only in urgencies, if the above mentioned contacts are not available 447 64820000

Thank you for helping us to take care of the resources and ensure seamless operations at Oslo Airport!