

PANT PLUS+

EXPLORING THE POSSIBILITIES OF EXTENDING TODAY'S PANT SYSTEM TO INCLUDE CLEANING PRODUCT BOTTLES

What do you notice about these two pictures?



Picture generated by DALL-E

Steps to implement Pant Plus+

Producer willingness

The producers must be willing to change their production system and marketing strategies. One way of motivating producers could be through adapting the producer responsibility system.



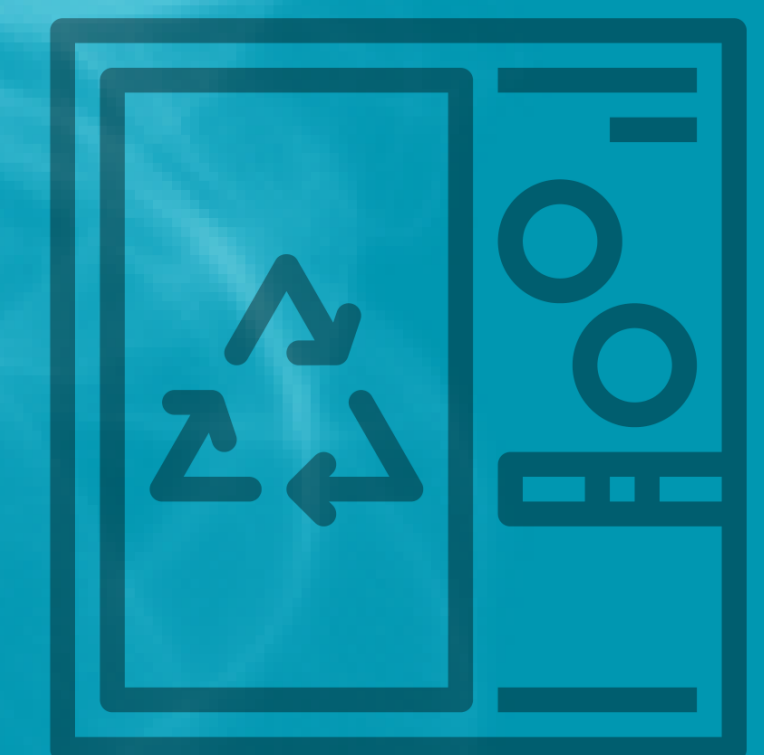
Regulated design

Standardized colors enable recycling, as mixed colors cannot be processed together. Standardized design ensures compatibility with existing Pant-machine systems.



Collection

Plastic containers for cleaning products will be deposited in today's RVM machines. Either in the machine or at a sorting plant, the packaging must be sorted in HDPE and PET fractions.



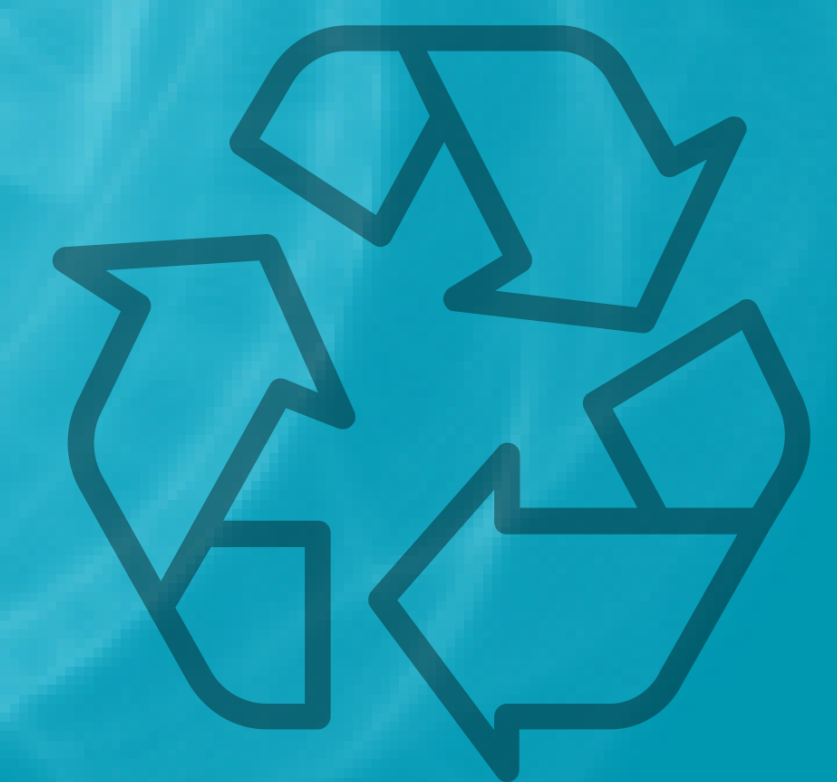
Consumer habits

The consumer must be motivated to return the bottles. The success of today's pant-system shows that this is possible, through assigning economic value to the cleaning product packaging.



Recycling

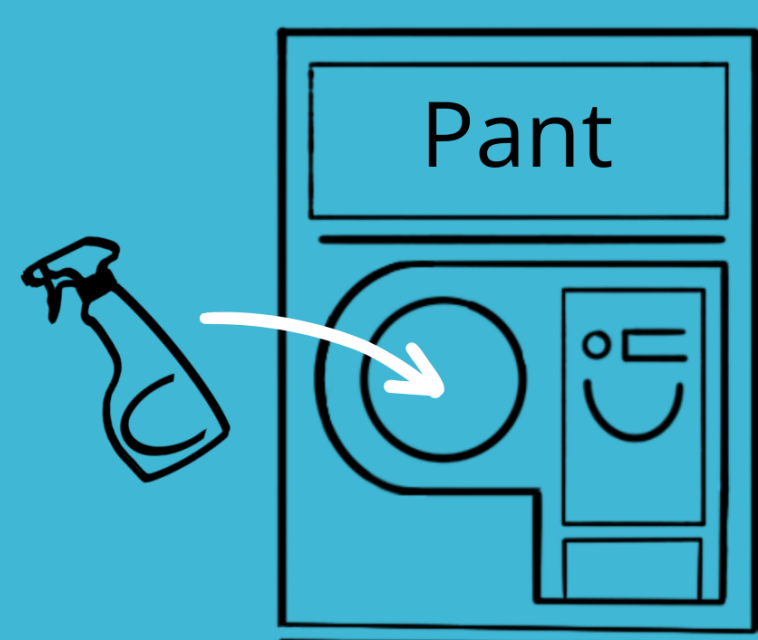
The HDPE and PET from the cleaning product bottles will then be recycled alongside PET bottles. With larger quantities of HDPE, it's possible to recycle it in Norway. Today it is transported to the Check Republic. *



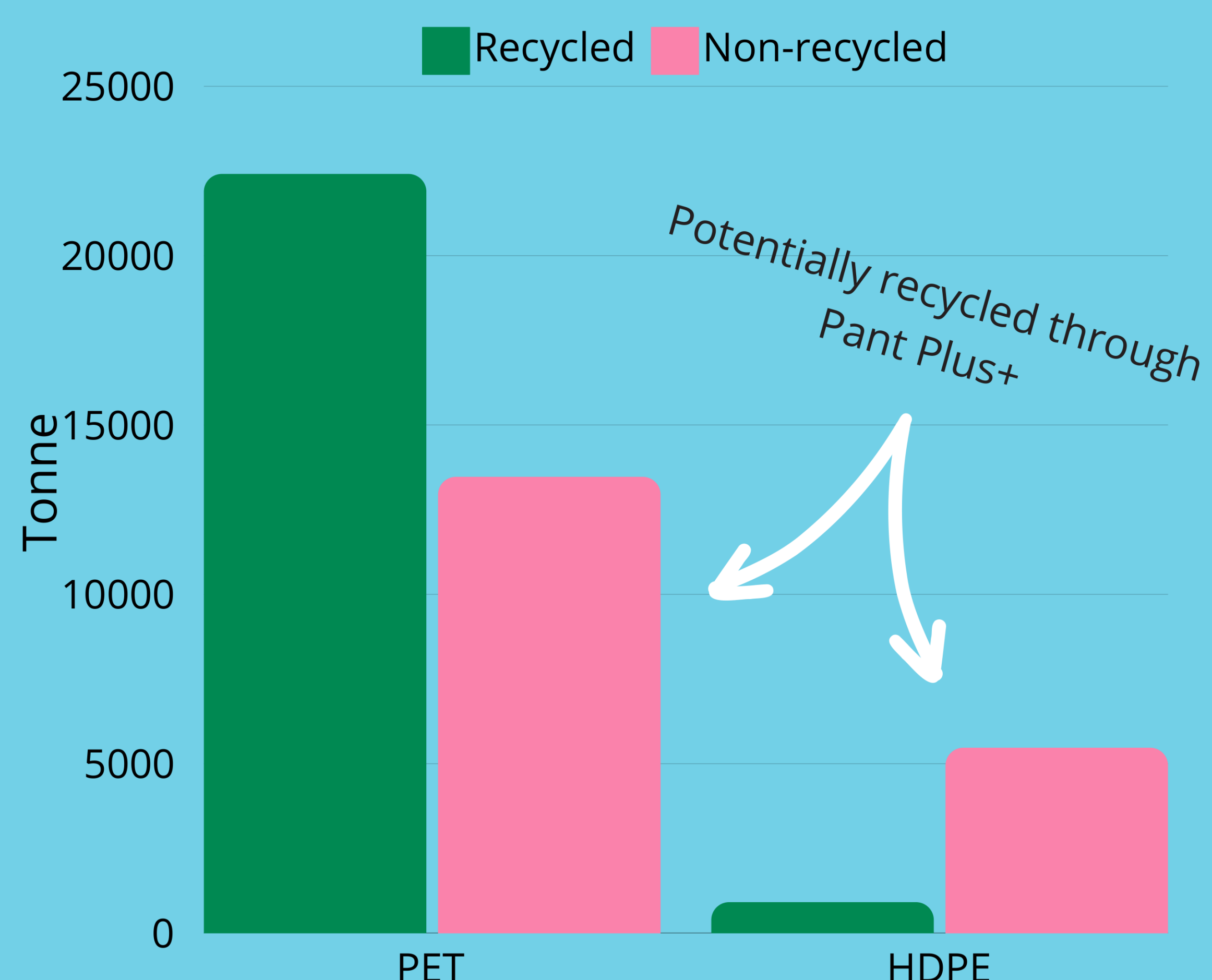
RVM for cleaning product bottles

By expanding the reversed vending machine system, we could use existing infrastructure to collect and recycle PET and HDPE from cleaning products.

This would simplify PET recycling and enable HDPE to be recycled in Norway.



There is a potential to increase the recycling rate of HDPE and PET by 89%



Challenges

Design related costs



Less marketing choices for producers



Contamination requirements



Opportunities

Producer cost saving



Less energy use



Reduction of CO2-equivalent emissions

