

A case study on the construction of the Marine environment model for port through Reduction of marine plastic and upcycling



Dead whale washed up in Philippines had 40kg of plastic bags in its stomach

Marine biologists horrified to find 16 rice sacks and multiple shopping bags inside Cuvier's beaked whale



▲ Darrell Blatchley pulling plastic out of the juvenile male Cuvier's beaked whale. Photograph: Darrell Blatchley/D' Bone Collector Museum Inc.



Marine Plastic



Causes of destruction of Marine Ecosystem

OCEANS WILL HAVE

By 2025:

1 tonne of plastic for 3 tonnes of fish



By 2050:

1 tonne of plastic for 1 tonne of fish



Our Responsible for polluting the sea

SHIP



Seafarers' Environment perception problem

PORT



The problem of garbage collection at port

The beginning of action for the ocean, Who together…?

What can we do for the ocean?



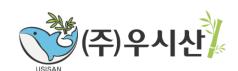
Public institution



Major company



Social enterprise



Social mission:
Whales
protection

International organization



Ulsan port environment protection

Environment protection campaign

Ocean cleanup activities

Proceed marine environment protect project

Discussion meeting and cooperative system establishment

Feb, Upcycling check



Upcycling expert discussing:
Ship waste plastic
can be upcycled(Cotton)

Mar, Collection plan



Ulsan port Ship garbage collect company(10)
Collaboration

April, MOU



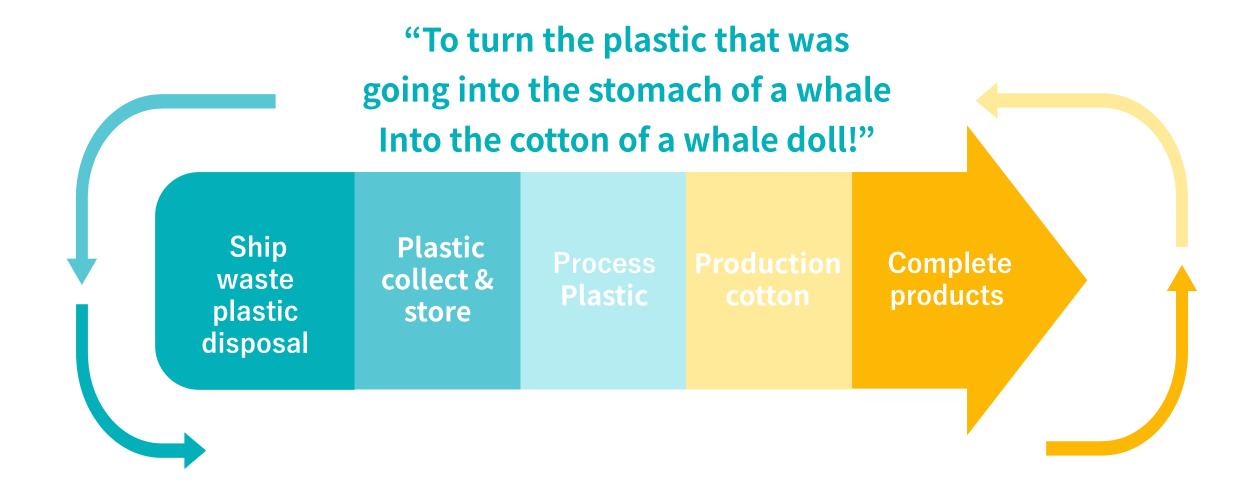








The procedure upcycling for ship waste plastic



Ship waste plastic disposal rule of Ulsan port(ship store)









Previous

Make a rule

Present

Mixed plastic

Only plastic bottle

Ship waste plastic disposal rule of Ulsan port(disposal)







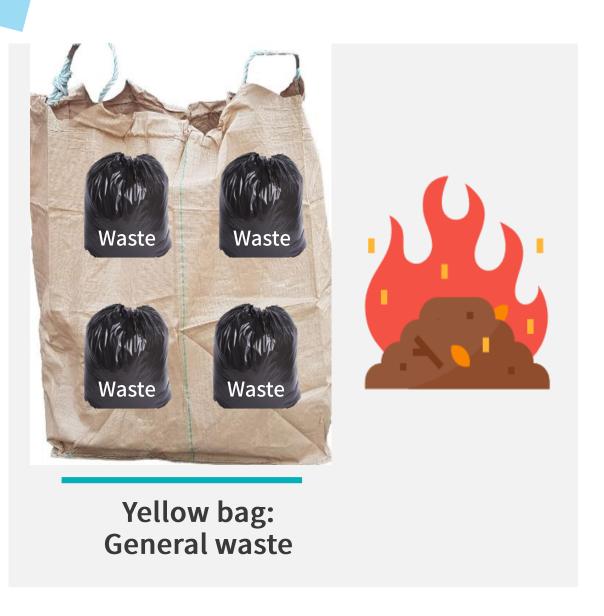


Unable to distinguish between general waste and recyclables



Burn everything

Ship waste plastic disposal rule of Ulsan port(disposal)





Efforts of the Ulsan Port Community





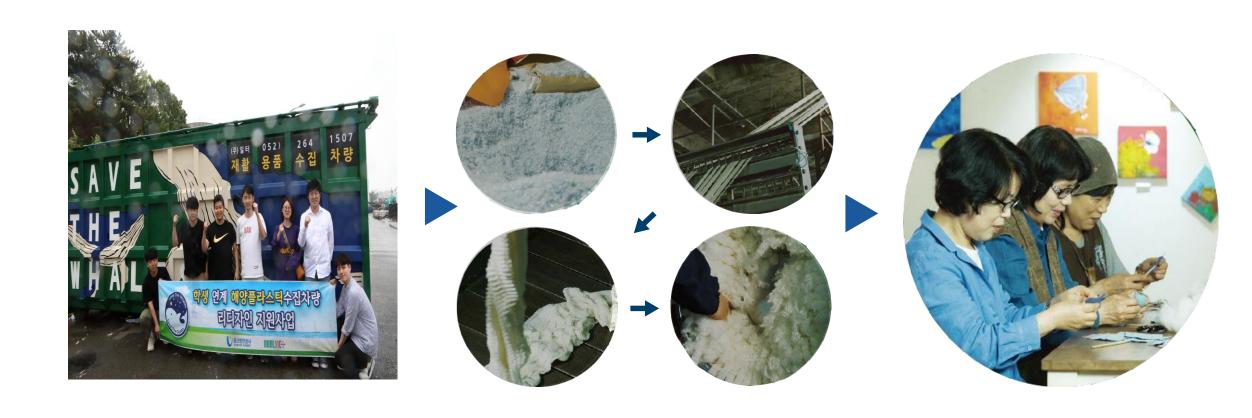


Environmental awareness improvement training

Policy guidance for Ulsan port entry ship

Plastic collect & store

Procedure Upcycling



Plastic store(in pier)

Production cotton

Doll sewing

Upcycling goods

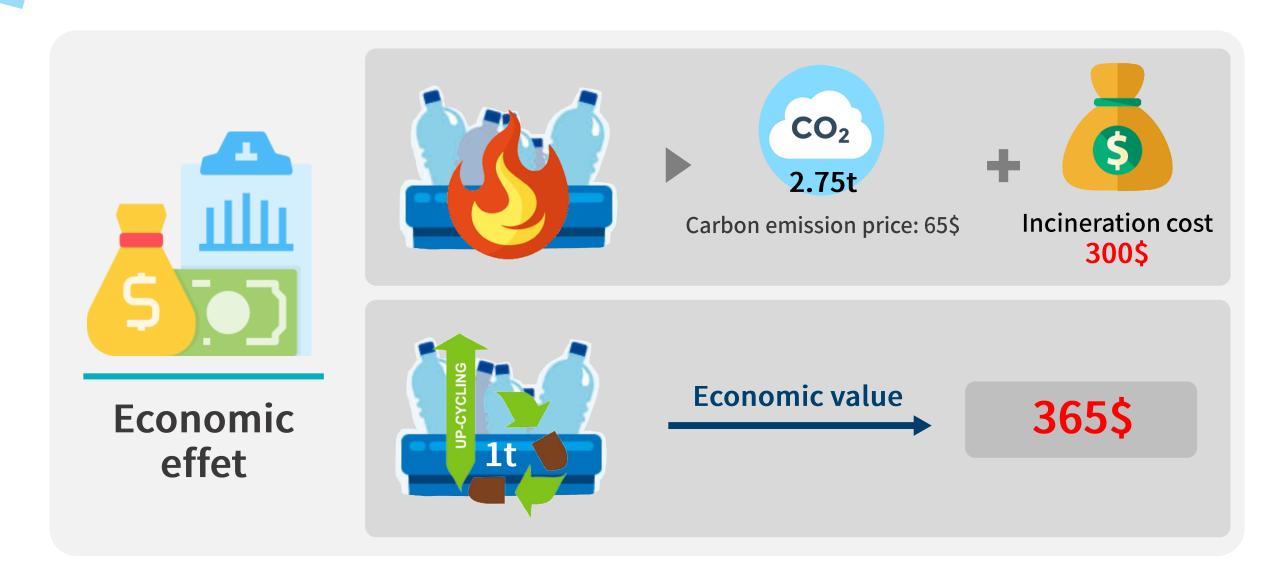




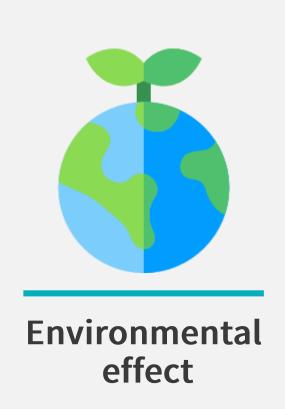




Upcycling, New social value creation



Upcycling, New social value creation

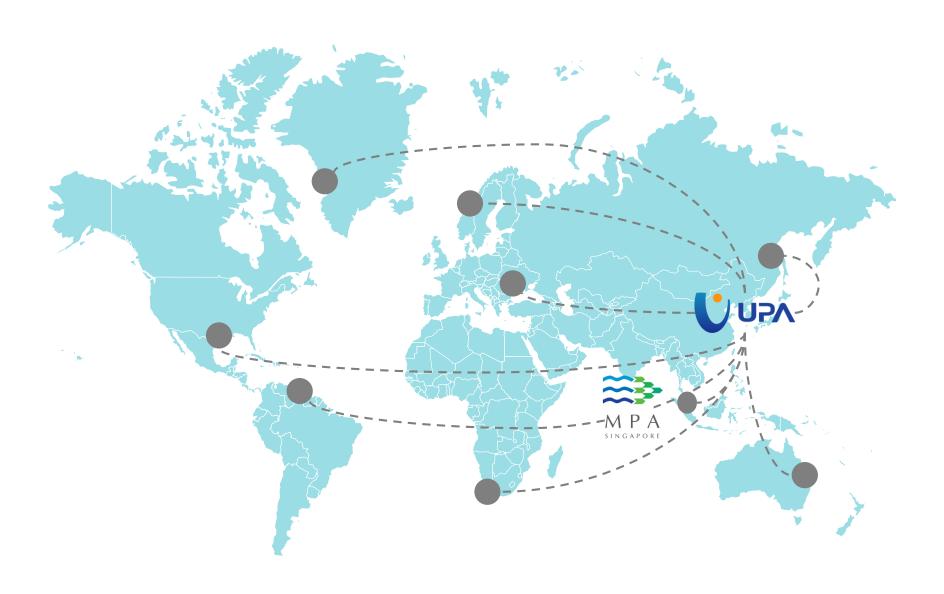


46800

The number of bottles used to make 2,300 whale dolls



Collaborate with Port Authority



Suggest to MPA

- 1. Join the project together
 - If the Singapore port were to participate in our project, it could spread to more ships.
- 2. Use whale dolls for souvenirs
 - Use whale dolls as symbols of marine environmental protection





Thank you

