

# DOING NOTHING IS NOT AN OPTION

**BERNARD MERKX**

- Entrepreneur
- CEO GreenWavePlastics
- Co-founder WasteFreeOceans
- Honorary President  
PlasticsRecyclersEurope
- Board of Directors Member  
PLASTIX Denmark / a.o.



## 2011 and beyond

### How and Why We Started....

Waste Free Oceans Foundation is a not-for-profit foundation, registered in Belgium since May 2011

Founders : Mr. Alexandre Dangis & Mr. Bernard Merkx

No of FTE's on pay roll : 0

Our "Champion - chair" is always a Member of the European Parliament

Mrs. Anna Rosbach (DK 2011-2014), Mr. Alain Cadec (F 2015-2019), and at present Mr. Soren Gade (DK 2020 - )

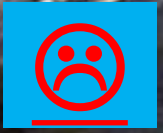
WFO Offices in Hong Kong (Asia Pacific), Dominican Republic (The Americas), Turkey (MEA), Brussels (HQ)

Our main goal is to reduce the global impact of marine litter. By mobilising fisheries, recyclers, manufacturers and policy makers, WFO aims to **reduce**, **reuse** and ultimately **recycle** marine litter, mitigating the impact on both the environment and natural resources.

Waste Free Oceans is committed to support cleaning of the oceans and seas, but also of the beaches, rivers, lakes, and other inland waters. We organise beach and river clean-up events regularly, in various parts of the world, together with local organisations and volunteers.



IMAGINE... YOUR LIFE  
SURROUNDED BY LITTER..

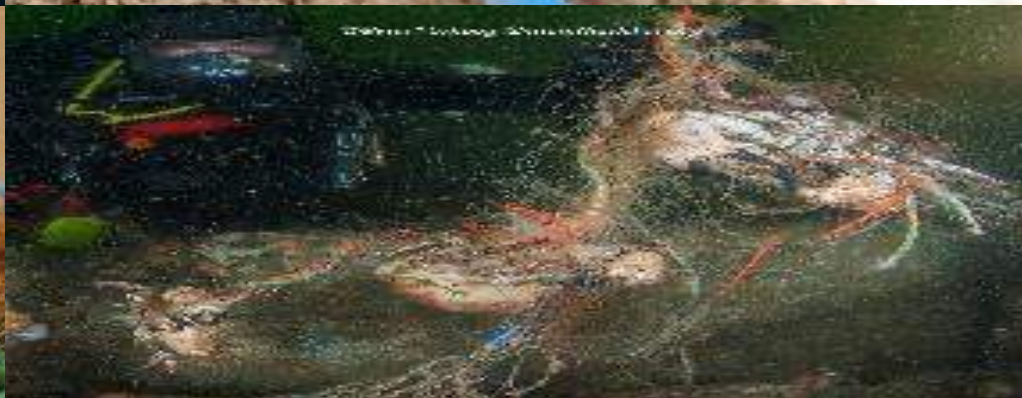




NO ONE ON THE PLANET WANTS TO BE SURROUNDED BY LITTER ☹️



WE, HUMANS, ARE MAKING A MESS OF IT (and not only on planet Earth)... ☹️



# PLASTICS IN THE SPOTLIGHT – MANY EU LEGISLATIONS ONGOING



**Plastics Strategy  
Circular Economy Package**



**Waste Package Directives  
Port Reception Facilities Directive  
Marine Strategy Framework Directive**



**Single-use Plastics Directive  
'Fishing gear' Directive**

## IT ALL STARTS WITH CLEAR DEFINITIONS

### What is **RECYCLING** ?

(Waste Framework Directive 2008/98/EC definition)

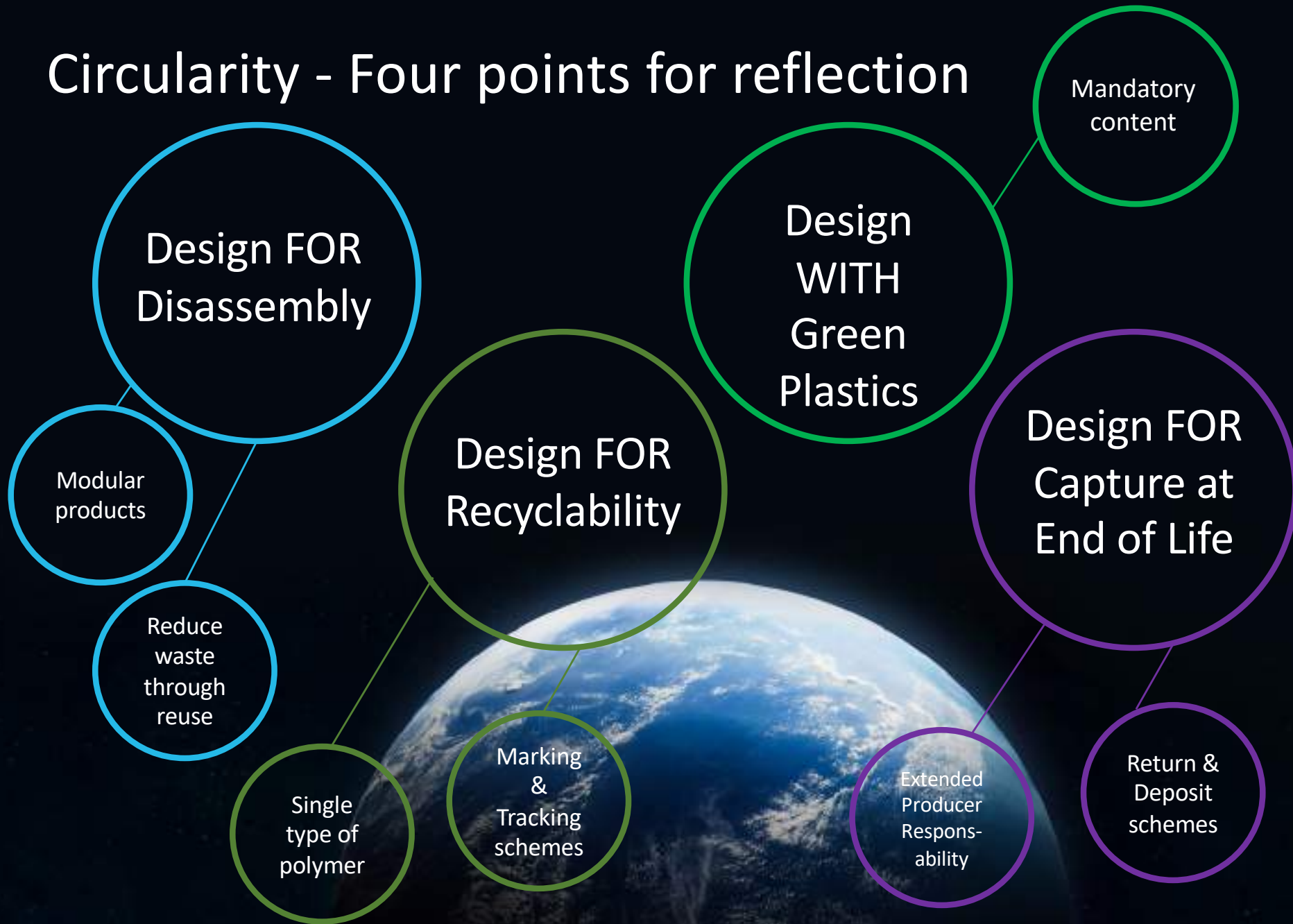
**Recycling** means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes.

It includes the reprocessing of organic material but does **NOT** include energy recovery and the reprocessing into material that are to be used as fuels or for backfilling operations.

Hence: Collection, logistics, sorting and “recovery” is **clearly not recycling**

**Mechanical recycling not only safeguards valuable resources but at the same time also a considerable amount of CO<sub>2</sub> emissions compared to virgin plastics**

# Circularity - Four points for reflection



Legislation as an accelerator





## FISHING FOR LITTER – TACKLING EXISTING MARINE DEBRIS



## DANUBE 2012

Partner Project WASTE FREE DANUBE





RIVER AND BEACH CLEAN UP CAMPAIGNS



100% RPET BOTTLE OF WHICH 11% RPET DANUBE COLLECTION



WFO GO CLEAN LITTERATI – DATABASE  
NL RHINE RIVERSIDES AND LAND



EUROPE'S FIRST MULTI VALUE CHAIN PARTNER PROJECT TO PREVENTIVELY COLLECT OBSOLETE GEAR, ROPES AND NETS INITIATED BY GREENWAVE & PLASTIX & DUTCH SEAL RESCUE CENTRE

# HAPPY SEAL

## fishnet recycling



GRONINGEN SEAPORTS



VisNed  
VISSERS MET TOEKOMST



HSBA  
HARLINGEN SEAPORT BUSINESS ASSOCIATION



Nederlandse  
Vissersbond



havenlauwersoog

# HAPPY SEAL WILDLIFE PROTECTION : FISHERMEN BRING RESCUED SEALS BACK TO SEA



# FISHING GEAR CLEAN TECH RECYCLING PLANT IN DENMARK





AQUACULTURE RINGS – INTO RECYCLED GRANULES – NEW RINGS OR PIPES



WFO BIGBOX – COMING TO MARKET – RECYCLED GEAR AND OTHER RECYCLATES



# BIZZ OPPORTUNITY TO USE BOXES FOR ONLAND AQUACULTURE ?

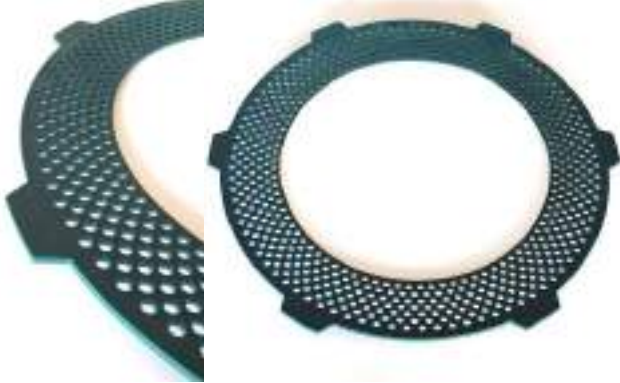


RE USABLE PERSONAL PROTECTION PRODUCTS MADE WITH RECYCLED (MARITIME) PLASTICS

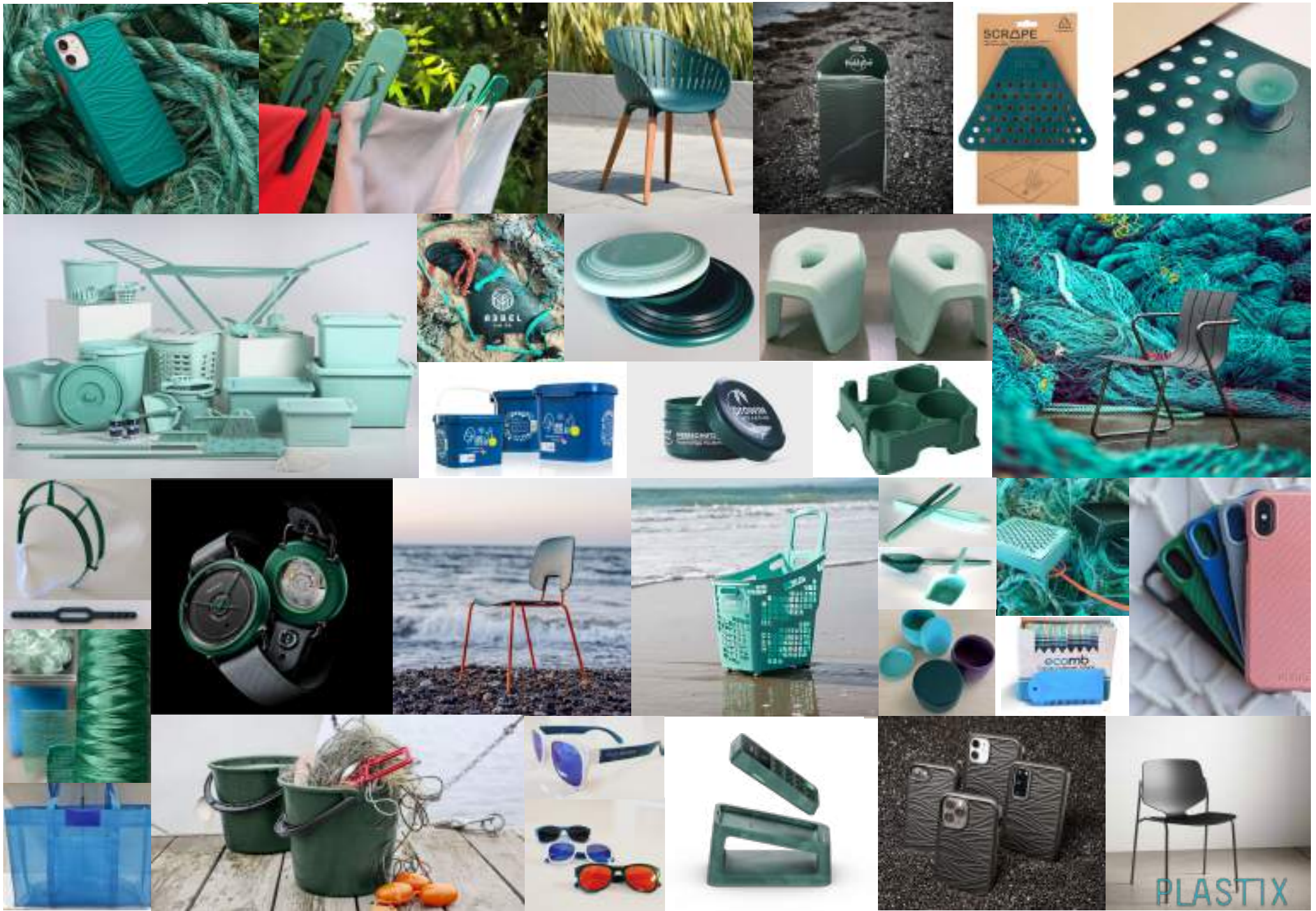


# 3D PRINTED 100% RECYCLED CONTENT PRODUCTS





PLASTIX



100% from ropes / fishing gear to fibers (mechanical recycled!!)





## FIBRES MADE FROM RECYCLED FISHING ROPES

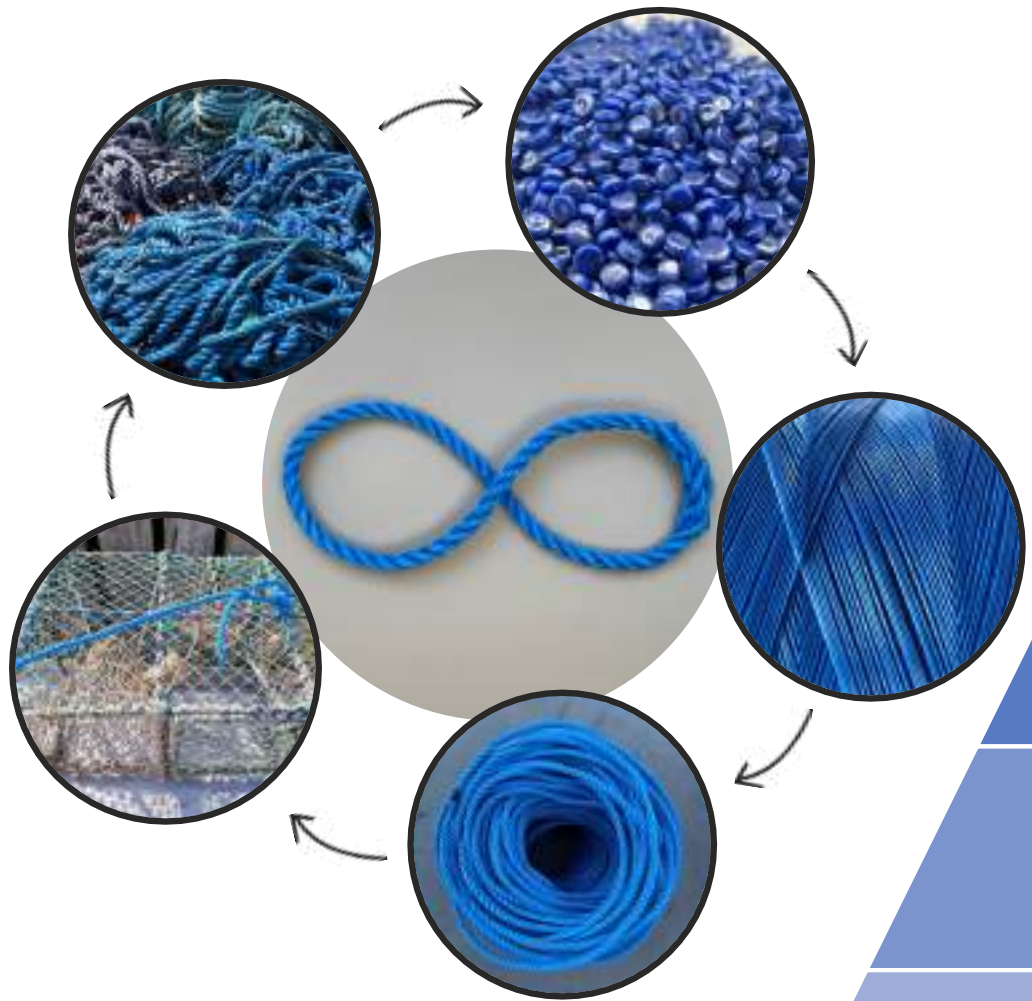


Approx. 30-50 tex fibers - made from:  
100% OceanIX rPPC and OceanIX rHDPE  
(30 tex = 300 gram per 10km fiber)

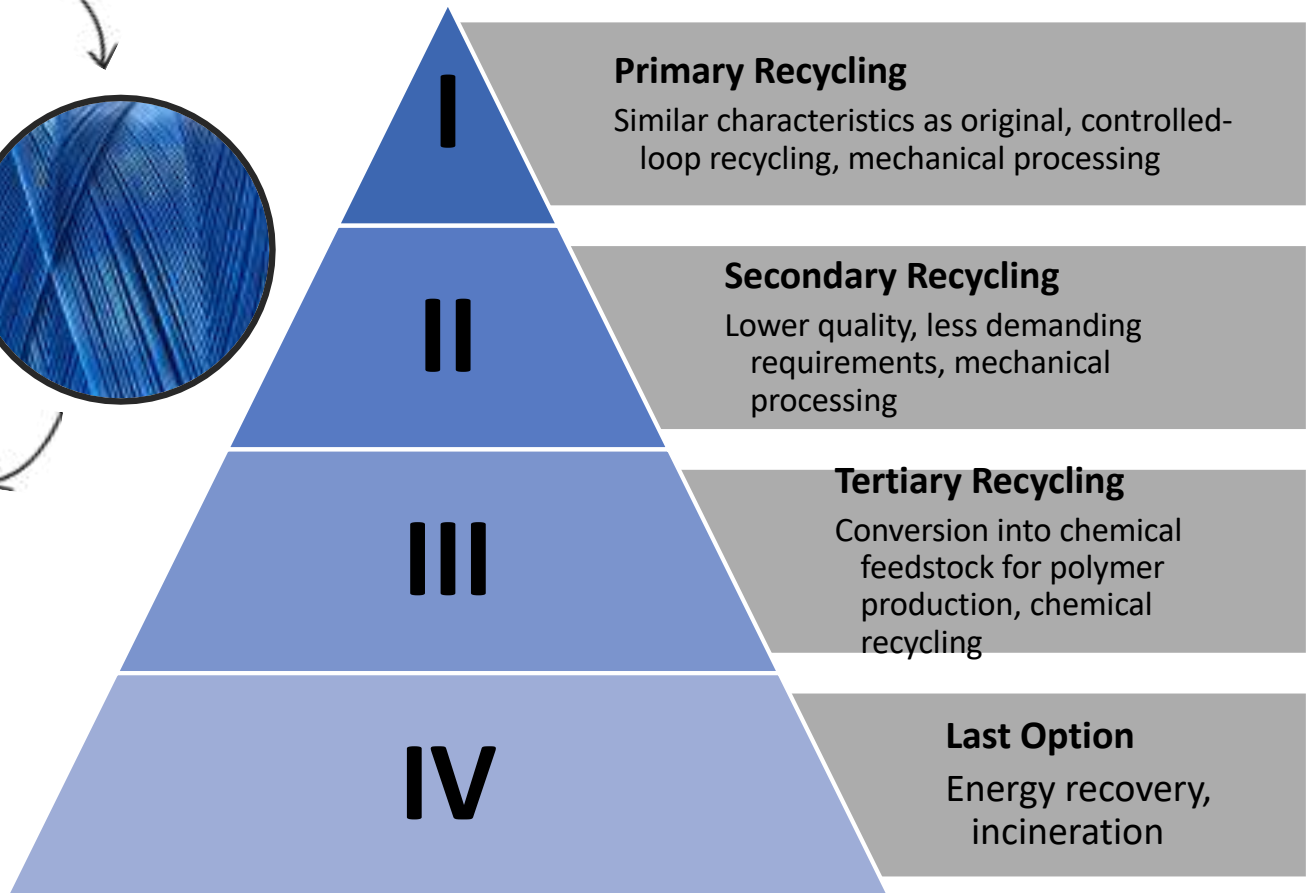


2,2 dtex fibers - made from:  
20% OceanIX rPPC  
(2,2 dtex = 2,2 gram per 10km fiber)

# From Rope to Rope – what it means to close the loop



Proof of concept - PLASTIX' Green Plastics  
mechanical recycling of post-consumer fibre  
material



SOME 'WILD' IDEAS : DANUBE ANGLERS TO PARTNER TO ADDITIONAL SOLUTIONS ?



## ECO FOOTPRINT WHEN REPLACING VIRGIN PLASTICS BY RECYCLATES

PLASTIX REDUCES CO<sub>2</sub>  
EMISSIONS UP TO 82%  
COMPARED TO VIRGIN PLASTICS

1 TON OCEANIX rHDPE OR rPPC USED MEANS  
1,7 TONS CO<sub>2</sub> EMISSIONS SAVED IN THE WORLD

Source: PLASTIX' Life Cycle Assessment (LCA)



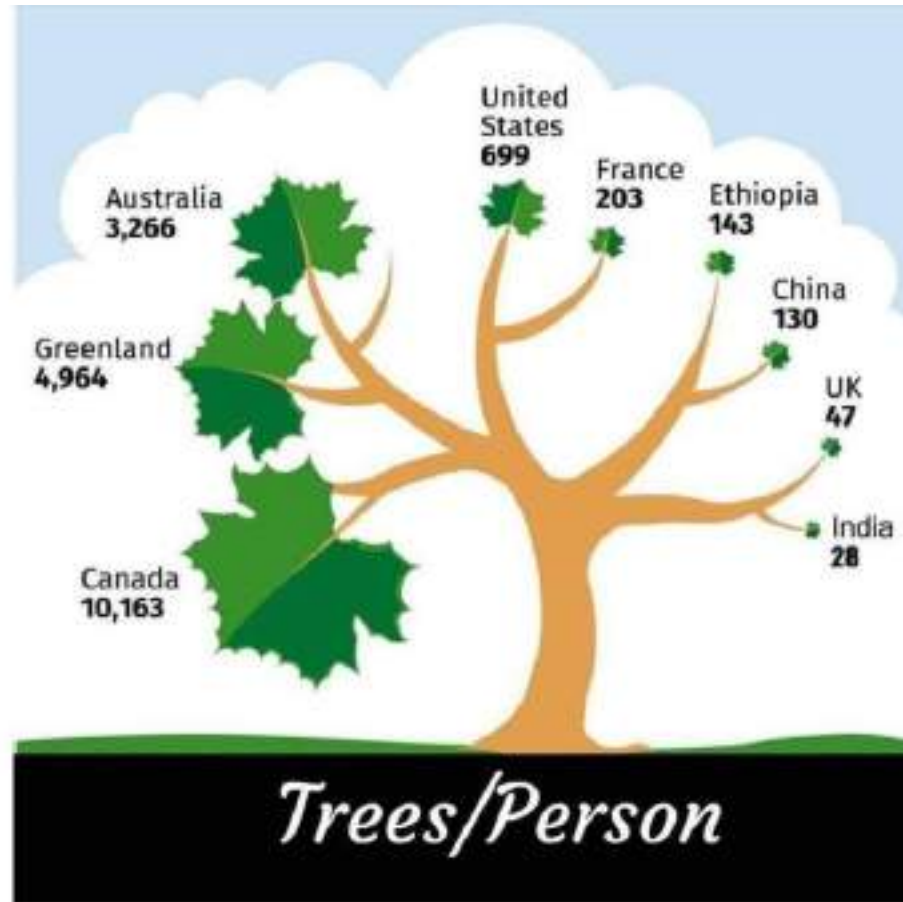
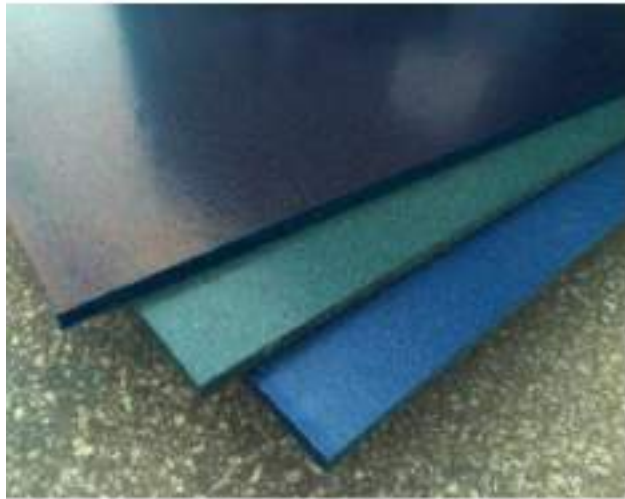
# FROM DIFFICULT TO RECYCLE WASTE STREAMS TO PRAGMATIC SOLUTIONS



# REFUGEES & LITTER SOLUTIONS : WFO REFUGEES SHELTERS & SOCIAL HOUSING



# GROWING SHORTAGE OF WOOD / PLENTY OF SUITABLE WASTE



WE CANNOT SOLVE OUR PROBLEMS  
WITH THE SAME THINKING  
WE USED WHEN WE  
CREATED THEM

-Albert Einstein

