

Local solutions noticed during the Race for Water Odyssey

Maison des Océans – June 8th, 2016



Presented by
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SAVE WATER FROM PLASTIC POLLUTION

RACE FOR WATER

« BY 2050, THERE WILL BE MORE PLASTICS THAN FISH IN THE OCEAN »

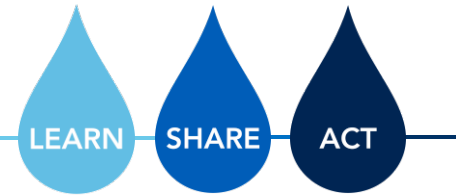
Source: WORLD ECONOMIC FORUM 2016 - Report from « Ellen MacArthur Foundation & McKinsey Center for Business and Environment »



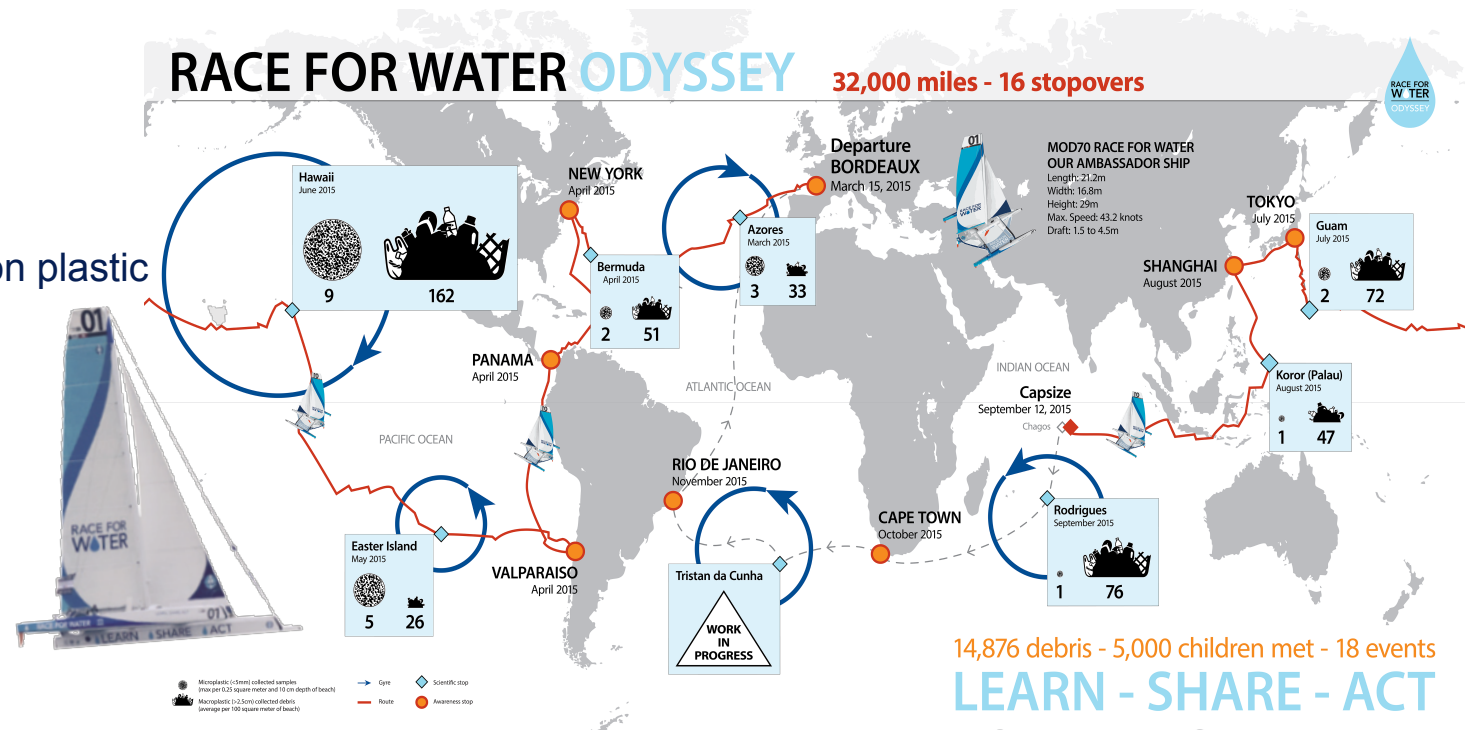
Race for Water Odyssey 2015
Hawaii, Big Island

THE RACE FOR WATER ODYSSEY

Objectives



- ✧ Scientific
- ✧ Communication
- ✧ Awareness
- ✧ Meeting with local actors on plastic pollution
- ✧ Observed local solutions:
 - awareness
 - education
 - cleaning
 - industrial model
 - lobbying
 - policy...



THE RACE FOR WATER ODYSSEY

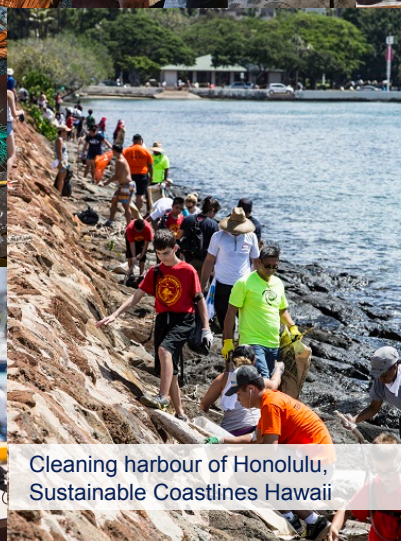
The MOD 70 R4W sailing team



Sailors arrival in Yokohama Bayside Marina, Tokyo
Race for Water Odyssey, July 2015

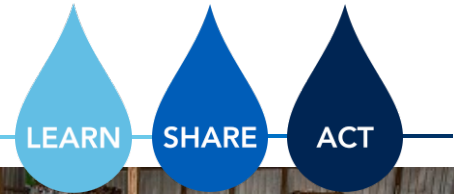
RAISING AWARENESS

Strong efforts of awareness on all islands visited



INDUSTRIAL SOLUTIONS

Some examples met



FROMM Factory in
Valparaiso



Fishing gear to Energy
project, NOAA



Waste pickers



Covanta Energy
Honolulu, Hawaii



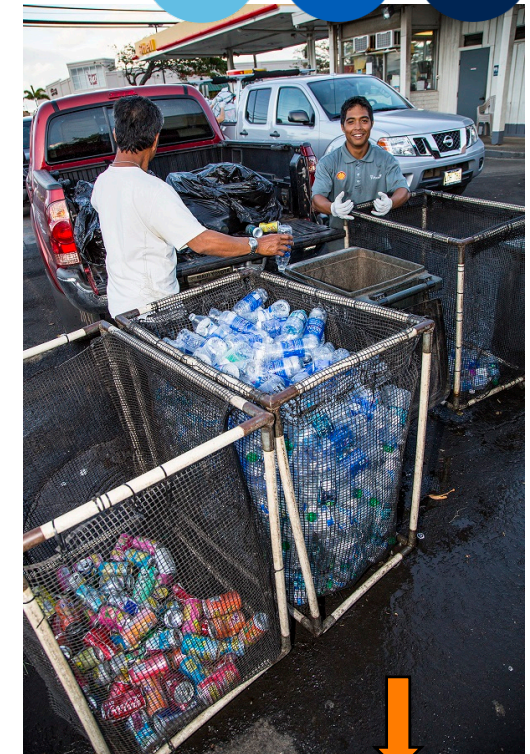
Storage for plastic recycling
Easter Island



Tetrapak™
House

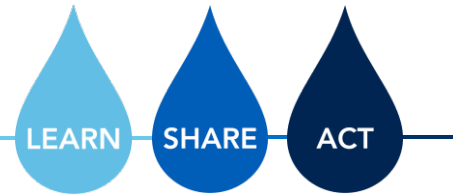
INDUSTRIAL SOLUTIONS

An innovative example: Blest engine in Koror



INDUSTRIAL SOLUTIONS

An example of organization model : Plastics.SA in Cape Town



www.marinedebrisolutions.org/global

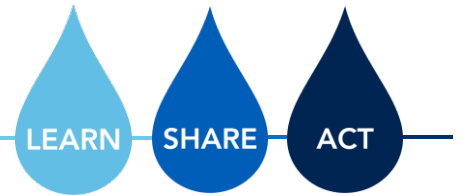


Two Ocean Team Marathon – clean-up campaign, ©PlasticsSA



INDUSTRIAL SOLUTIONS

An example of organization model : Plastics.SA in Cape Town



From 9 480
tonnes a year in to
64 000
tonnes recycled in 2014



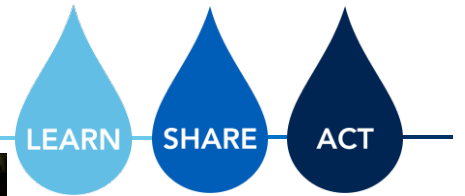
PET Recycling by PETCO



Atlantic Plastic Recycling. Ltd
Circular model of polyethylene (PE)

CLEANING SOLUTIONS

Eco barriers in Rio de Janeiro



NEW ACTIONS ADOPTED BY RACE FOR WATER FOUNDATION

ACT

“PLASTIC WASTE TO ENERGY”



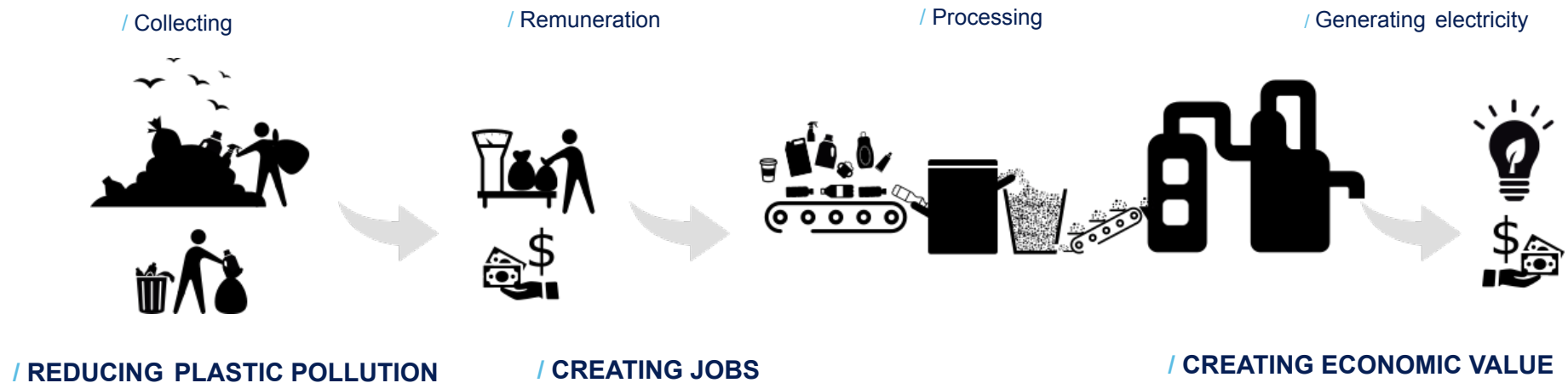
A LAND-BASED SCALABLE SOLUTION
GIVING A VALUE TO END-OF-LIFE PLASTIC
TO PREVENT THE POLLUTION OF OUR WATERWAYS

« PLASTIC WASTE TO ENERGY »

The value chain

ACT

An approach based on **social entrepreneurship with tangible impacts**



« PLASTIC WASTE TO ENERGY »

A revolutionary technology



Plastic waste to Energy thanks to **a revolutionary technology.**

/ Unique to transform waste in energy using:

a ultra-high temperature hydrolysis (1200 °C, no oxygen)

/ Energy recovery from waste and biomass in the form of **Syngas**

/ **No waste sorting**, nor clean-up phase required

/ **No emissions**, nor toxic residues, meeting highest environmental regulations

« PLASTIC WASTE TO ENERGY »

Easter Island – key figures

ACT

	2015
Resident population	> 6'000 people
Total waste (all kinds)	> 2'500 tonnes
Marine debris	> 50 tonnes
Recovery of PET (white), paper/cardboard, glass, steel, aluminium and TetraPak™ packaging	> 300 tonnes



« PLASTIC WASTE TO ENERGY »

Easter Island – storage of waste



The unsorted waste goes to the local landfill with no treatment

→ Over 2,000 tonnes in 2015

Benefits of this “Plastic waste to Energy” solution for Easter Island:

- ✓ Partial remediation of the local landfill
- ✓ Recycling of approx. 10 tonnes of marine debris and of the entire annual production of plastic waste
- ✓ 2,000 MWh of power injected into the local network = approx. 1,250 Rapa Nui households



RACE FOR WATER FOUNDATION

Research and awareness

ACT

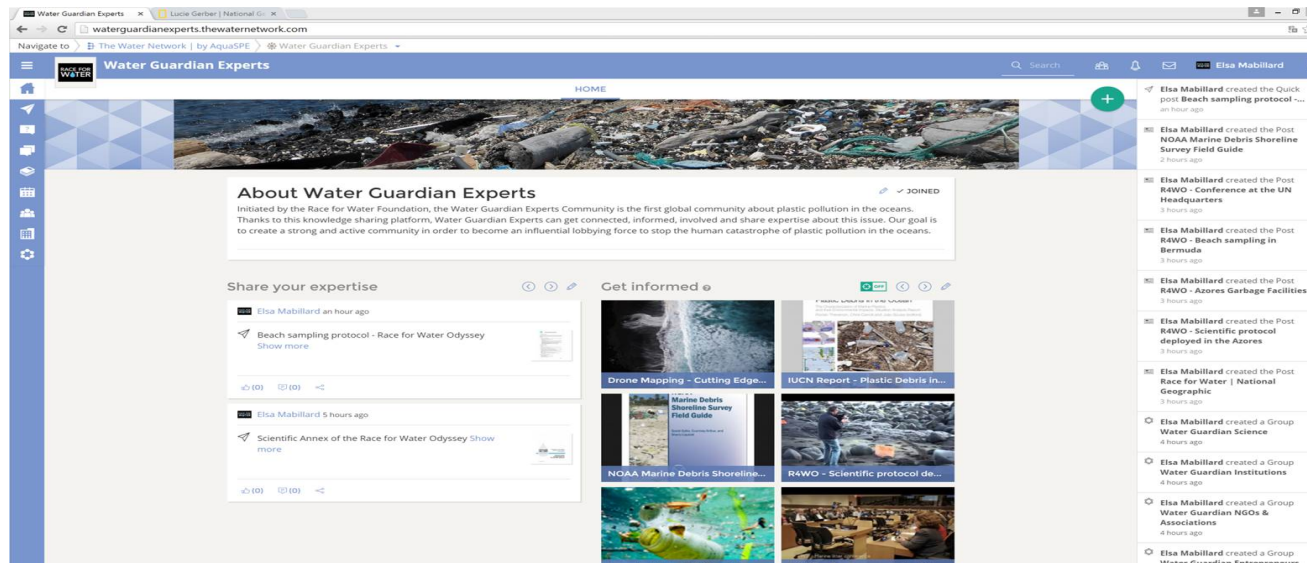


Race for Water Solar Vessel
back in Lorient

RACE FOR WATER FOUNDATION

The Water Guardian Experts platform

ACT



- A unique online knowledge sharing platform to get informed, connected, involved and share in order to stop the human catastrophe of plastic pollution in oceans.
- A community of committed **Water Guardian Experts** met mainly during the Race for Water Odyssey : scientists, NGOs, local associations, institutions, governments, managers, industrials...

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Race for Water Odyssey 2015 – Koror Island