

Jan & Oscar Foundation and
Ranong Recycle for Environment Social Enterprise
Ropes and nets Collection in Ranong, Thailand
Yearly report for EJF - 2021





Ranong Recycle for Environment (RRE) is a social enterprise created in 2019 by the Jan & Oscar Foundation and located in Ranong, south of Thailand.

RRE is collecting Ocean-bound plastic from collectors living on islands, or coastal-based less than 50 km away from the shores.

In 2021, the Jan & Oscar Foundation joined the Environmental Justice Foundation in the Net Free Seas project. RRE commits to collect for recycling discarded fishing gear and plastic waste from the fishing industry, from coastal and island communities.

Ranong Recycle for Environment is composed of a team of 17 people, the majority of whom are from local minorities: Moken communities or Burmese migrants.

RRE is managed by Nirattisai Ponputi (Chay) and is developing projects through its Project coordinator Jutamart Naorachan (Bow).

The project is supervised by the Jan & Oscar Foundation through the Project leader Dr Michel Pardos, and the Project manager Capucine Paour.





On October 8 2021, RRE was the first collection center in Thailand to become Ocean Bound Plastic certified, according to the Zero Plastic Ocean standard.

Plastic collected for NFS in 2021

117 270 kg of Ocean Bound plastic has been collected by RRE in 2021, among which 17 365 kg of discarded fishing ropes and nets for the Net Free Seas project.

By AREA						
AREA of origin	PP and HDPE nets & ropes (kg)	Nylon nets not clean (kg)	Nylon nets clean (kg)	Total (kg)	Percentage	Total price paid (THB)
Island - Chang	6,686	164	0	6,850	39%	34,250
Island - Lao	2,945	38	14	2,997	17%	15,069
Island - Pak Nam	295	187	0	482	3%	2,410
Island - Phayam	2,057	13	0	2,070	12%	10,350
Island - Saidam	0	0	0	0	0%	0
Island - Sinhai	2,640	70	828	3,538	20%	22,658
Island - Surin	1,150	0	0	1,150	7%	5,750
Coastal-based - Kraburi	0	7	0	7	0%	35
Coastal-based - Ranong	118	153	0	271	2%	1,355
Grand Total	15,891	632	842	17,365	1	91,877

Processing the Nylon nets at RRE

The Nylon nets are purchased from the collectors at 5 THB / kg (including transport costs) when they are not clean, and 11 THB / kg (including transport costs) when they are clean. In 7 hours of work, one worker process approximately 15 kg of Nylon nets.

Here are the different steps of processing:

- Separate the different types of entangled material
- Remove the organic waste
- Dry clean all the small waste by hands
- Clean with water if needed
- Handle for drying after water cleaning
- Bale the nylon nets in the baling machine to save space for transport

Processing the Nylon nets at RRE

Separate the different type of entangled material



Processing the Nylon nets at RRE

Remove the organic waste



Processing the Nylon nets at RRE

Dry clean all the small waste by hands



Processing the Nylon nets at RRE

Clean with water if needed and handle for drying after water cleaning



Processing the Nylon nets at RRE

Bale the nylon nets in the baling machine to save space for transport.



Nylon nets breakdown costs

Cost of the Nylon nets for RRE

1 kg of dirty nets = buy + process + bale + data & management
cost in THB = 5 20 1 1
Total costs for RRE = 27 THB

1 kg of clean nets = buy + bale + data & management
cost in THB = 11 1 1
Total costs for RRE = 13 THB

The current purchasing price is 13 THB / kg + transport costs paid by the buyer.
This model is currently not sustainable for RRE.

Nylon nets sold in 2021

One truck of baled Nylon nets has been sent to Teamplas, partner of the NFS project, in order to be recycled= 1'396 kg kg sold to Teamplas at 13 THB /kg. Teamplas paid for the transport costs. A local recycler from Suksamran is offering to buy the clean nylon nets at 15 THB /kg.



Processing the PP and HDPE nets and ropes at RRE

In 7 hours of work, one worker process approximately 70 to 200 kg of PP ropes.

Here are the different steps of processing:

- Separate the different types of entangled material
- Separate the non-recyclable part of the ropes (with black oil on it, etc.)
- Cut the ropes if needed
- Remove the sand by shaking the ropes by hand
- Weight the ropes to make 120 kg jumbo bags
- Bale the PP ropes in the baling machine

Processing the PP and HDPE nets and ropes at RRE

Separate the different types of entangled material and the non recyclable parts.



Processing the PP and HDPE nets and ropes at RRE

Cut the ropes if needed, and remove the sand by shaking the ropes by hand.



Processing the PP and HDPE nets and ropes at RRE

Weight the ropes and nets to make 120 kg jumbo bags, and bale them



PP ropes breakdown costs

Cost of the PP ropes for RRE

1 kg of ropes =	buy	+	process	+	bale	+	data & management	+	transport to Bkk
cost in THB =	5		2 to 5		1		1		1.5

Total costs for RRE = from 10.5 to 13.5 THB

The current purchasing price is 11 THB / kg (RRE pay for the transport costs).
This model is currently not sustainable for RRE.

PHOTO GALLERY

Discarded nets and ropes on the beaches











Islands ropes and nets collectors































EJF at Koh Chang























Process at RRE

















