

ECONOMIC MODEL AND ASSESSMENT OF DEPOLLUTION COSTS FROM THE NETWORK OF SEASHORE CLEANUP STATIONS



TAHO'E ECO ORGANISATION | 2022

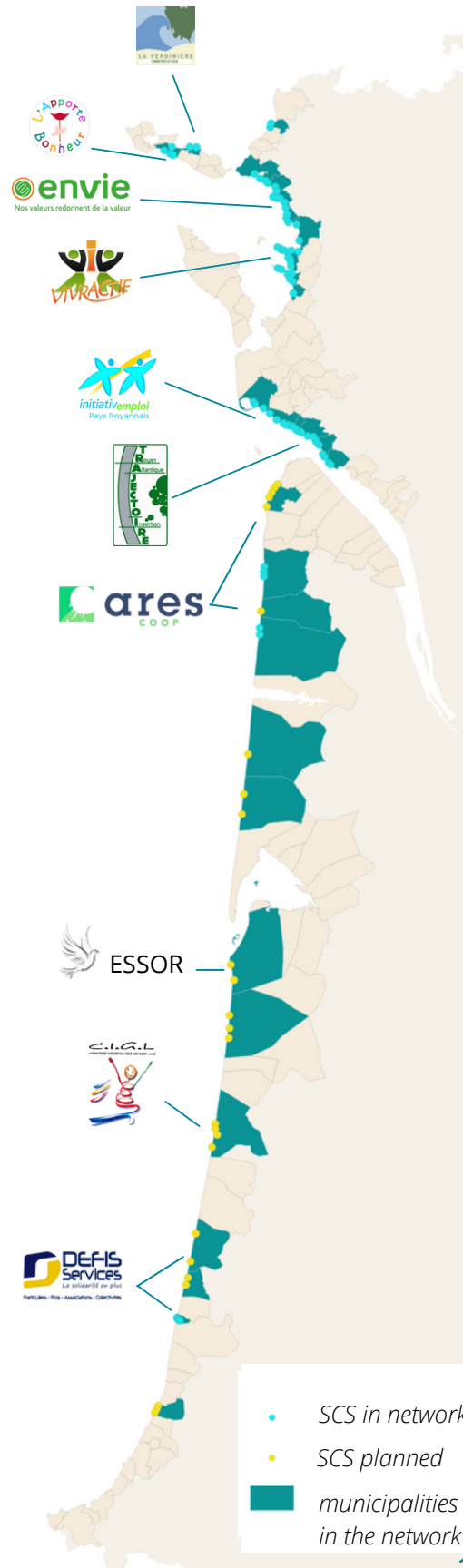
T.E.O.

A STRUCTURING APPROACH INITIATED IN "NEW AQUITAINE"

Professional management of the seashore cleanup stations provides a view of the areas of accumulation and estimates the daily quantities of plastic material washed up on the coastline.

This deployment of seashore cleanup stations, combined with data acquisition, owes its success to citizen participation and the development of a network of "integration companies" that collect marine waste.

The INAE association makes it possible to identify the integration structures present in each territory

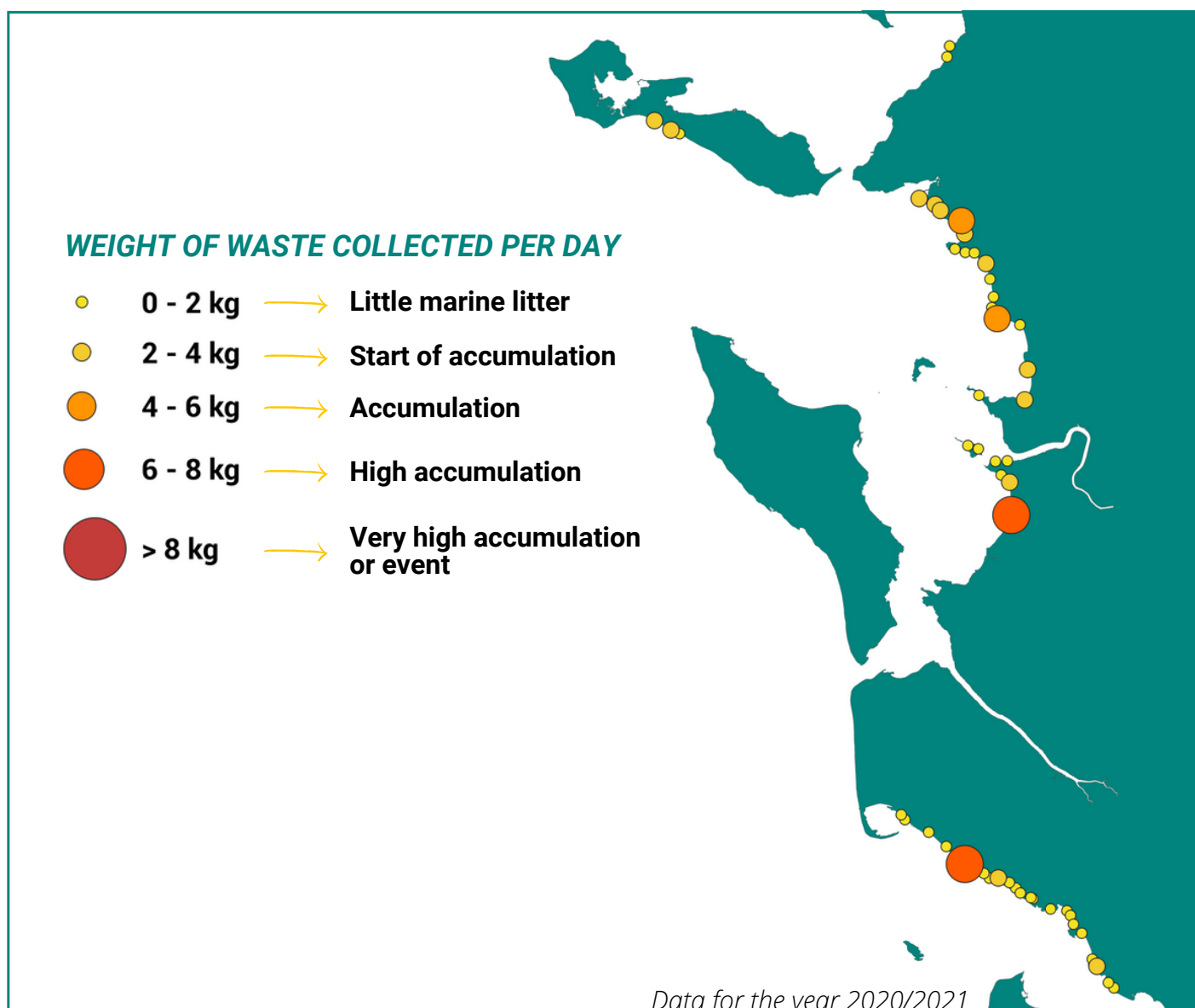


A DOUBLE GOAL ACHIEVED.

1. The state of accumulation of marine litter washed up on the coastline or the anthropogenic pressure of plastics.
2. The cost of collecting per kilo and the economic impact of this pollution.

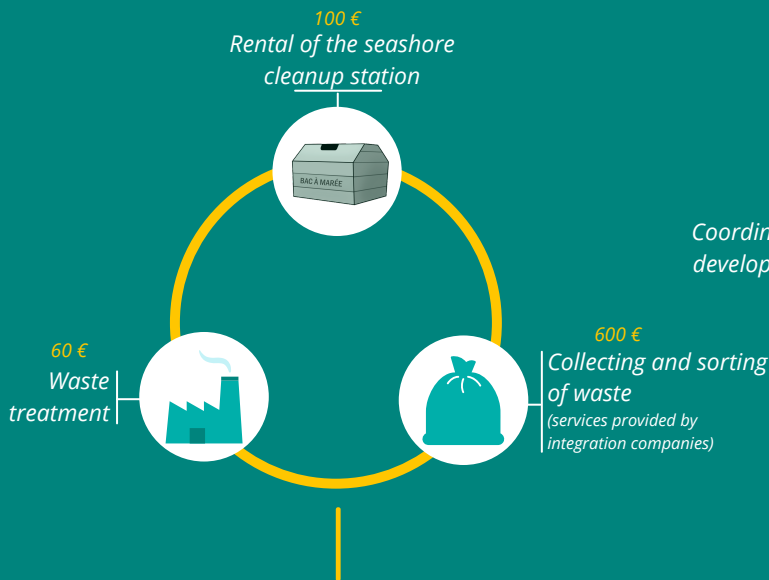
The daily accumulation indicator in kg/day, translates into daily accumulation per km of coastline, as we estimate that the perimeter of effectiveness of a seashore cleanup station is one linear kilometre.

THE TEO SCALE OF MARINE LITTER ACCUMULATION

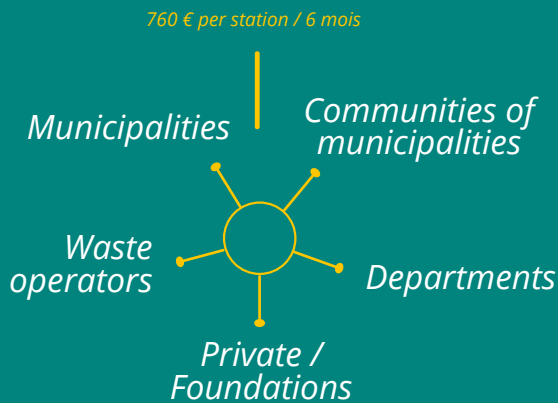


DETAILS OF COSTS EXCLUDING TAXES FOR A 6 MONTH CAMPAIGN

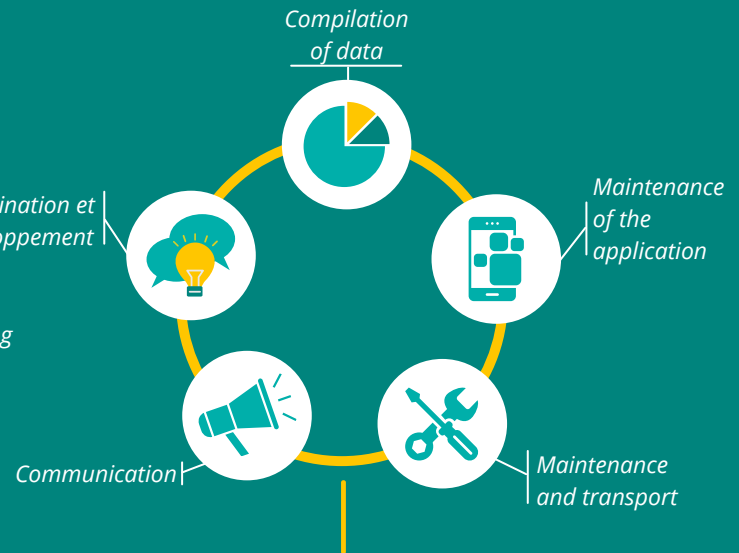
OPERATIONAL



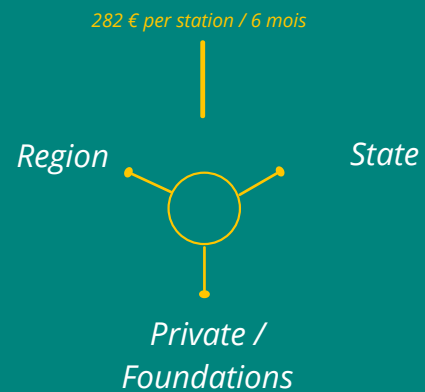
POTENTIAL FUNDING OF SERVICES



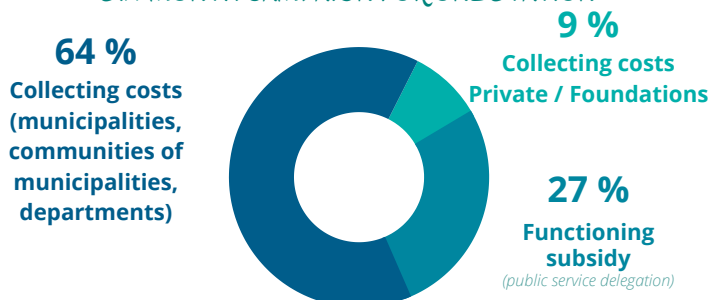
ENGINEERING



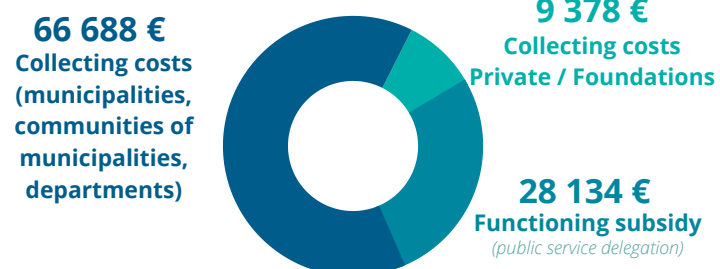
FUNDING OF THE ACTIVITIES



CURRENT MODEL --> €1042 EXCL.TX
AFTER 3 YEARS OF EXPERIMENTATION
 SIX-MONTH CAMPAIGN FOR ONE STATION



FOR THE 2021/2022 CAMPAIGN, THE COST PER 100 STATIONS WOULD BE --> €104,200 EXCL.TX



BUSINESS MODEL BY TERRITORY

AT 01.10.21

ÎLE DE RÉ

67 %
Collecting costs
Municipalities



6 %
Private / Foundations
Paprec / CRC

27 %
Functioning subsidy
State / Region

CDA OF LA ROCHELLE

58 %
Collecting costs
*Municipalities 39%
communities of municipalities 19%*



15 %
Private / Foundations
Léa Nature / Paprec / CRC

27 %
Functioning subsidy
State / Region

ROCHEFORT Océan

63 %
Collecting costs
*Municipalities 39%
communities of municipalities 24%*



10 %
Private / Foundations
Léa Nature / CRC

27 %
Functioning subsidy
State / Region

ROYAN ATLANTIQUE

58 %
Collecting costs
*Municipalities 48%
communities of municipalities 10%*



15 %
Private / Foundations
Léa Nature / CRC / Rotary Club

27 %
Functioning subsidy
State / Region

DEPARTMENT OF GIRONDE

73 %
Collecting costs
*Municipalities 30%
departments 43%*



0 %
Private / Foundations

27 %
Functioning subsidy
State / Region

DEPARTMENT OF LANDES

73%
Collecting costs
*Municipalities 67%
departments 6%*



0 %
Private / Foundations

27 %
Functioning subsidy
State / Region

THE RESULT OF THE DATA

FROM 3 CAMPAIGNS OF 6 MONTHS OVER 3 YEARS OF COMPILED DATA

50 stations
678 collection



64 000 kg of waste collected over 3 years

1 station



approximately 426 kg of waste
collected per 6-month campaign

AN AVERAGE OF 2.327 KG OF WASTE COLLECTED PER DAY

Note: There are sometimes significant disparities between the different containers depending on the accumulation areas.

ESTIMATION BY EXTRAPOLATION OF THE TOTAL QUANTITIES OF WASTE WASHED UP ON THE CHANNEL AND ATLANTIC COASTS (4 159 KM)

We believe that an average of 7 tonnes are stranded per day between Dunkirk and Hendaye

= 2 657 tons / year

Of which in New Aquitaine 620 tonnes

Of which in Charente-Maritime 268 tonnes

DETAILS OF THE COSTS (EXCL. VAT) OF DEPOLLUTION BY MATERIAL PER KILO



Estimated cost of this clean-up as a minimum
4 MILLION PER YEAR



**WITHOUT CITIZEN PARTICIPATION
THIS COST WOULD DOUBLE!**

RECOMMENDATIONS

To optimise the network and facilitate the compilation of data



Install the seashore cleanup stations for a minimum of 6 months - October to March.

(period of strong winds and important beachings - if possible out of nesting periods and out of very touristic periods)



Install the stations as close to the coast as possible and keep them away from car parks to avoid household waste.



Encourage links between citizens, elected representatives, local authorities and integration companies or associations.

(in the form of local committees for example)



Use signage reminding people that the **seashore cleanup stations are not bins** but indicators of the ecological state of the coastline.



Do not recycle the waste. Most of the beached plastics are potentially harmful because they are loaded with Persistent Organic Pollutants, heavy metals, additives etc... it is therefore preferable not to recycle them or to make them into art objects to avoid spreading micro-pollutants. This is a precautionary principle.

OUTLOOK



Install **100 seashore cleanup stations per coastal region** to assess the costs of clean-up more accurately.



Communicate on the price of clean-ups based on the idea that one kg of plastic abandoned in nature will cost local authorities approximately 2 euros/kg collected (2000 €/tonne), hence the importance of implementing prevention policies.



Propose that EPR (Extended producer responsibility) pay for collection and treatment.



Create a "post-storm" alert on the BAM network to increase efficiency and mobilise integration companies and volunteers "occasional collaborators of a public service".



To open the "**Environmental Engineering Worker**" course, with the option of preserving the environment in the context of plastic pollution.

CONTACTS

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