



NURDLES: THE PROBLEM, SOLUTIONS AND HOW THE CONSTRUCTION INDUSTRY CAN PLAY A ROLE.

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Overview

- Pre-production pellet (nurdle) pollution and Fidra's work
- Solutions and the responsibility of the plastic supply chain
- How the construction industry can play a role in preventing pellet loss



Who are we?

Evidence based

Collaborative

Working towards positive,
pragmatic solutions

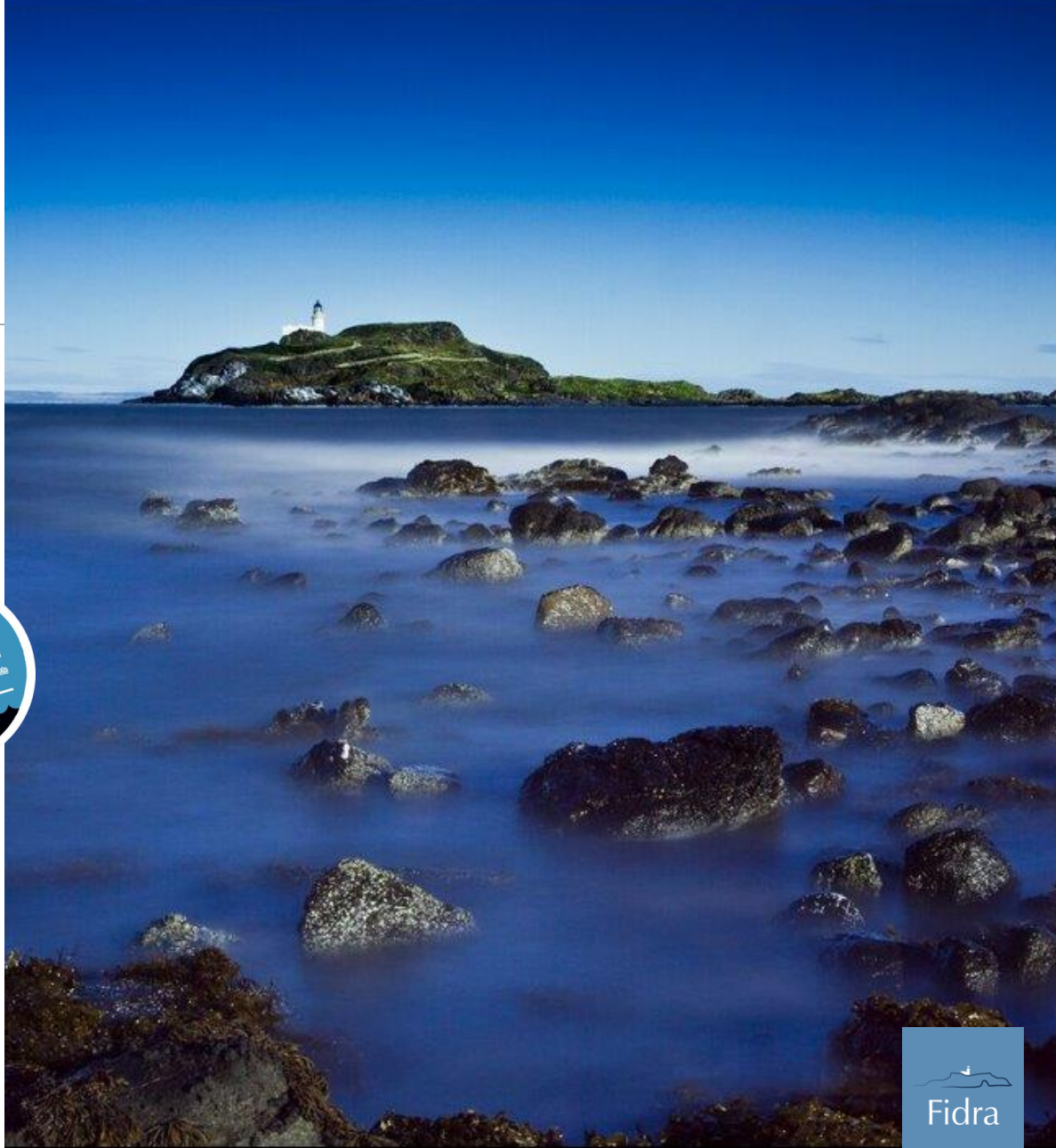
Our work on pellets

Since 2012

Citizen Science Project

Collaborative industry
engagement

Working with NGO partners to
stop pellet loss



What are nurdles?



Small plastic pellets about the size of a lentil



The 'raw material' for almost all our plastic products. Building blocks of the plastic industry.



2-3mm diameter,



1kg plastic = 50 000 nurdles

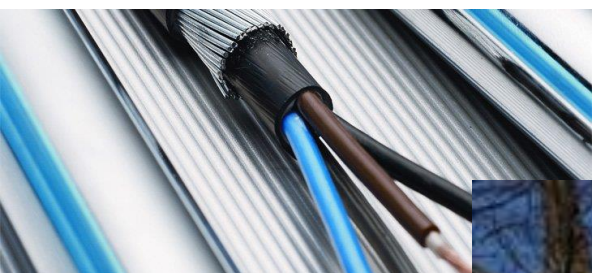


PET, HDPE, LDPE, PP, PVC, etc...



= 600 nurdles





How do pre-production plastics become marine litter?

Complex supply chain

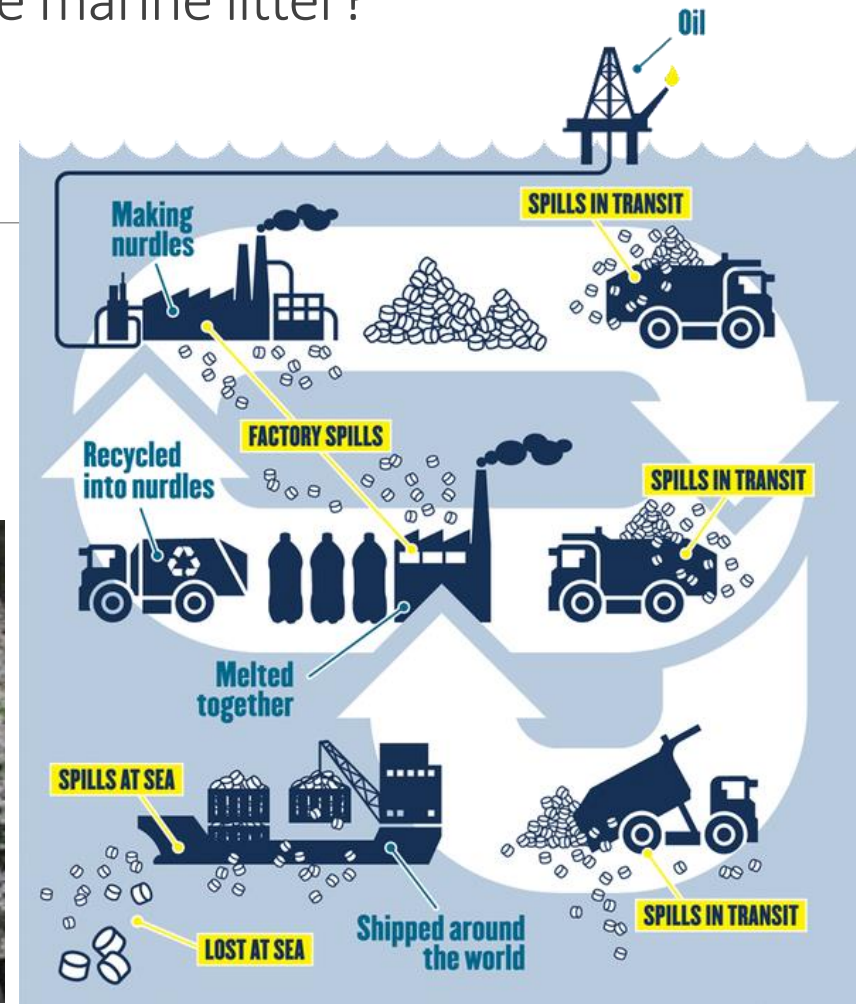
Pellets might be handled on average 5 times each in their full lifecycle

Lost at all stages of pellet handling

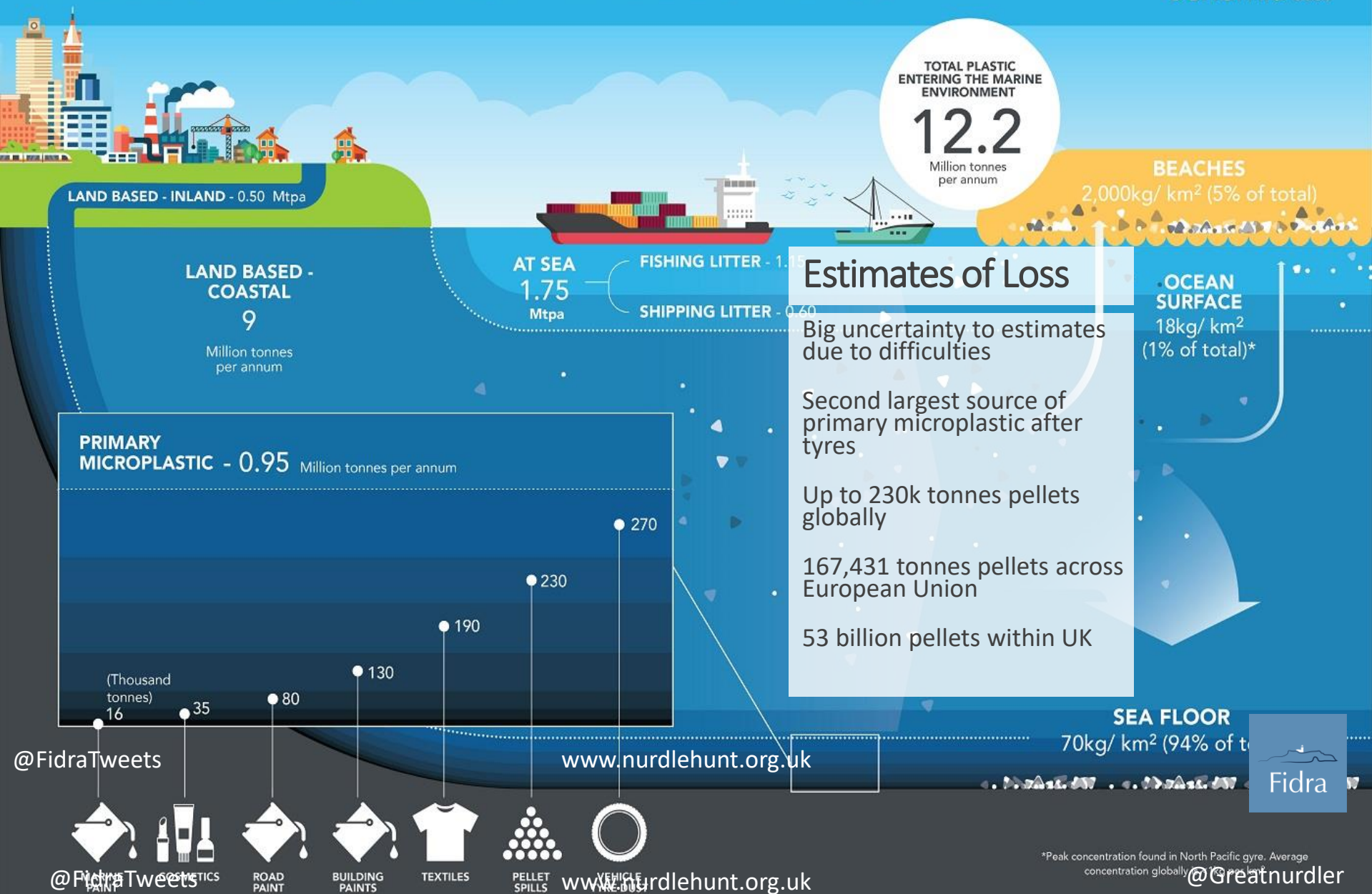
~300 million tonnes of plastic are produced globally

Set to double by 2030

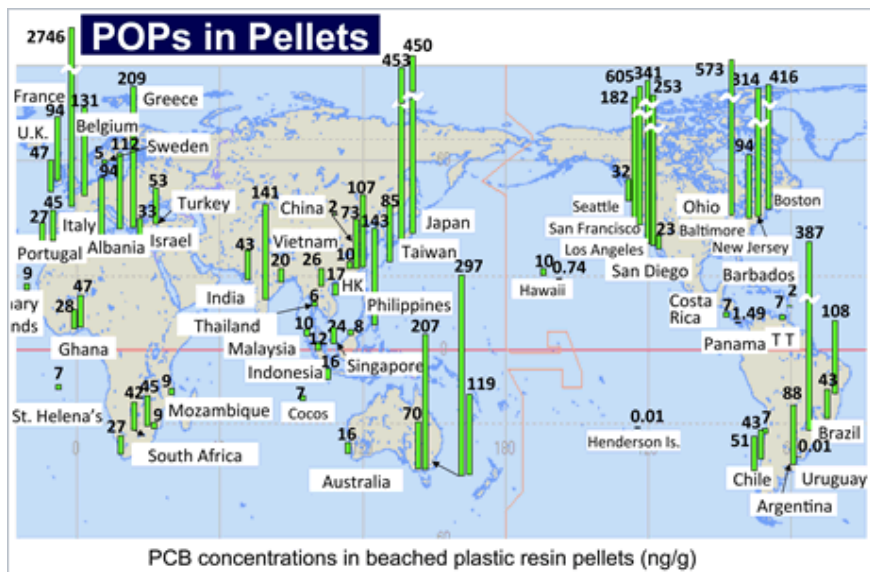
1 tonne of plastic = 50million pellets



PLASTICS IN THE MARINE ENVIRONMENT: WHERE DO THEY COME FROM? WHERE DO THEY GO?



Why are they a problem?



Gull pellet



Skua pellet



93% of fulmars autopsied contain plastic.



Our Nurdle Map



- >1900 nurdle hunts reported to our map to date
- 84% report nurdles on beaches
- Found on the coastline of every European country monitored
- 31 of 34 countries monitored worldwide





North Queensferry

Highly polluted beaches

Around 10% of hunts have found 1000+ nurdles

Millions estimated on worst polluted beaches

This data is essential to show people care and there is an issue

Our focus is on preventing loss at source





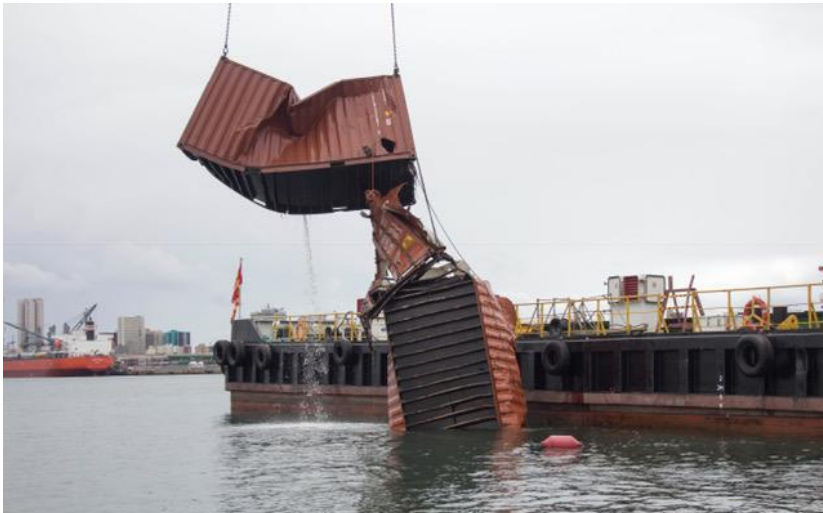




Durban
Spill

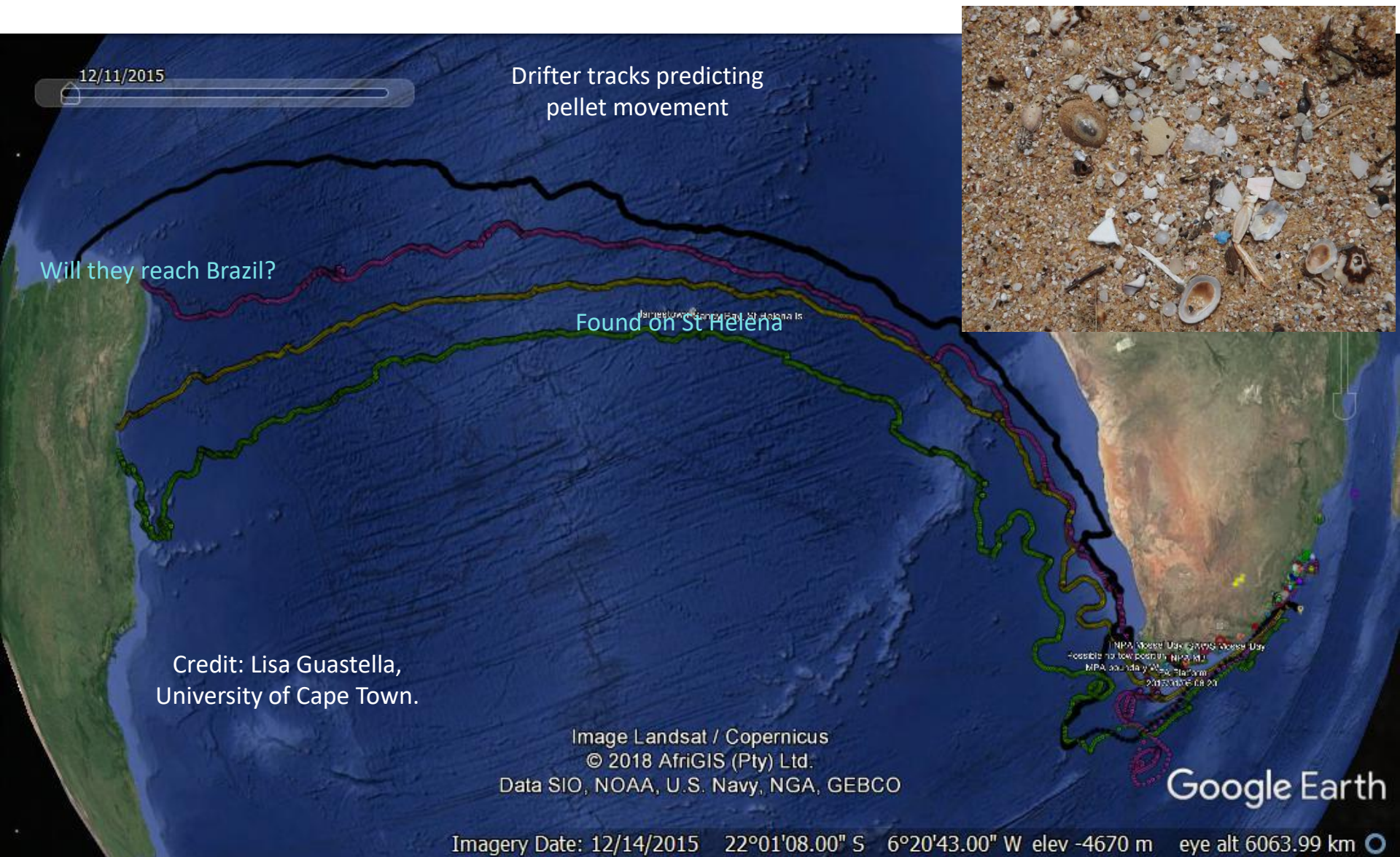
October
2017

49 tonnes
of nurdles



Localised
spills, far
reaching
pollution





What's the solution?

- Best practice measures can prevent pellet loss
- Simple and low cost equipment
- Staff training and awareness raising
- Communicating with suppliers and customers



Filters in drains



Reducing risk of bags breaking



Dealing with spills outside

Image sources:
Plastics Europe,
Glendale Plastics



Industry Action: Operation Clean Sweep



www.operationcleansweep.co.uk

www.opcleansweep.eu

Positives

- Comprehensive toolkit
- Resources available
- Companies can show commitment
- Growing engagement from trade associations

Issues

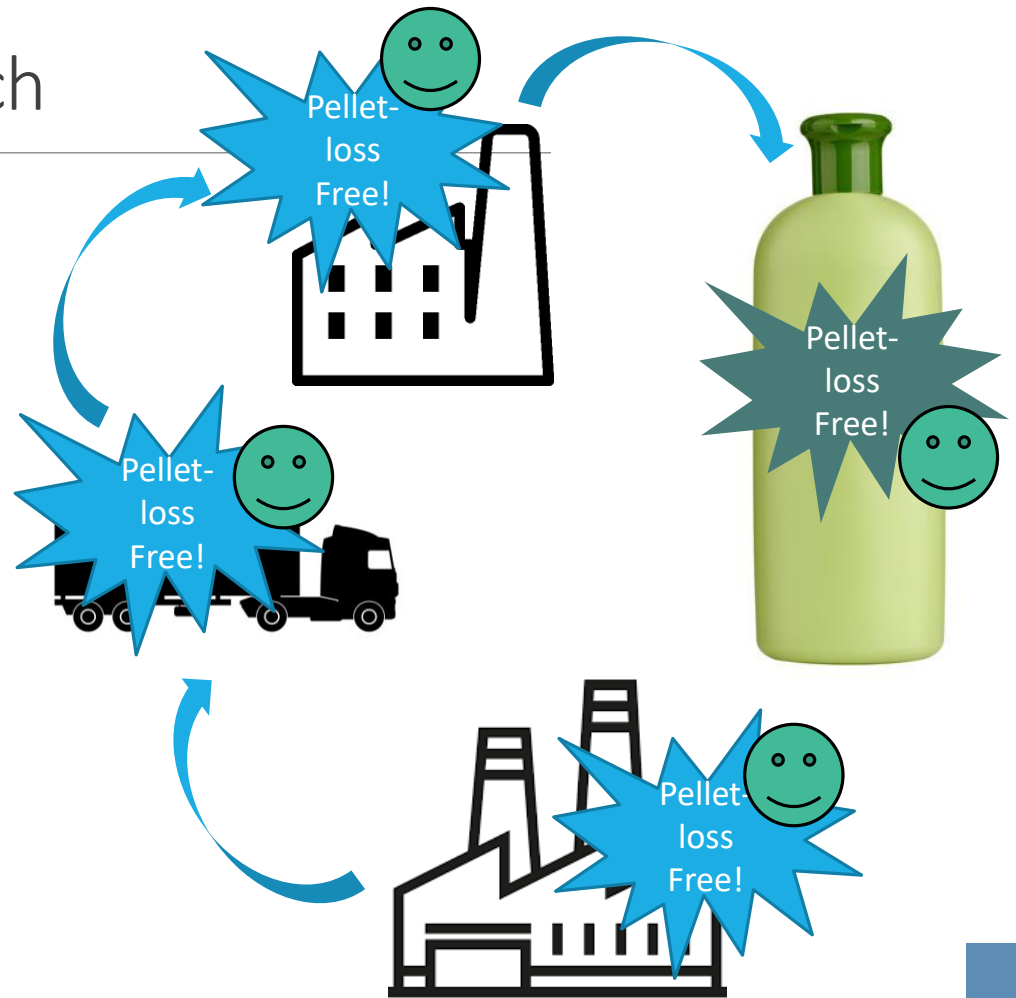
- Voluntary
- No external checks to make sure it's effective
- Limited take-up



Our vision: A supply chain approach

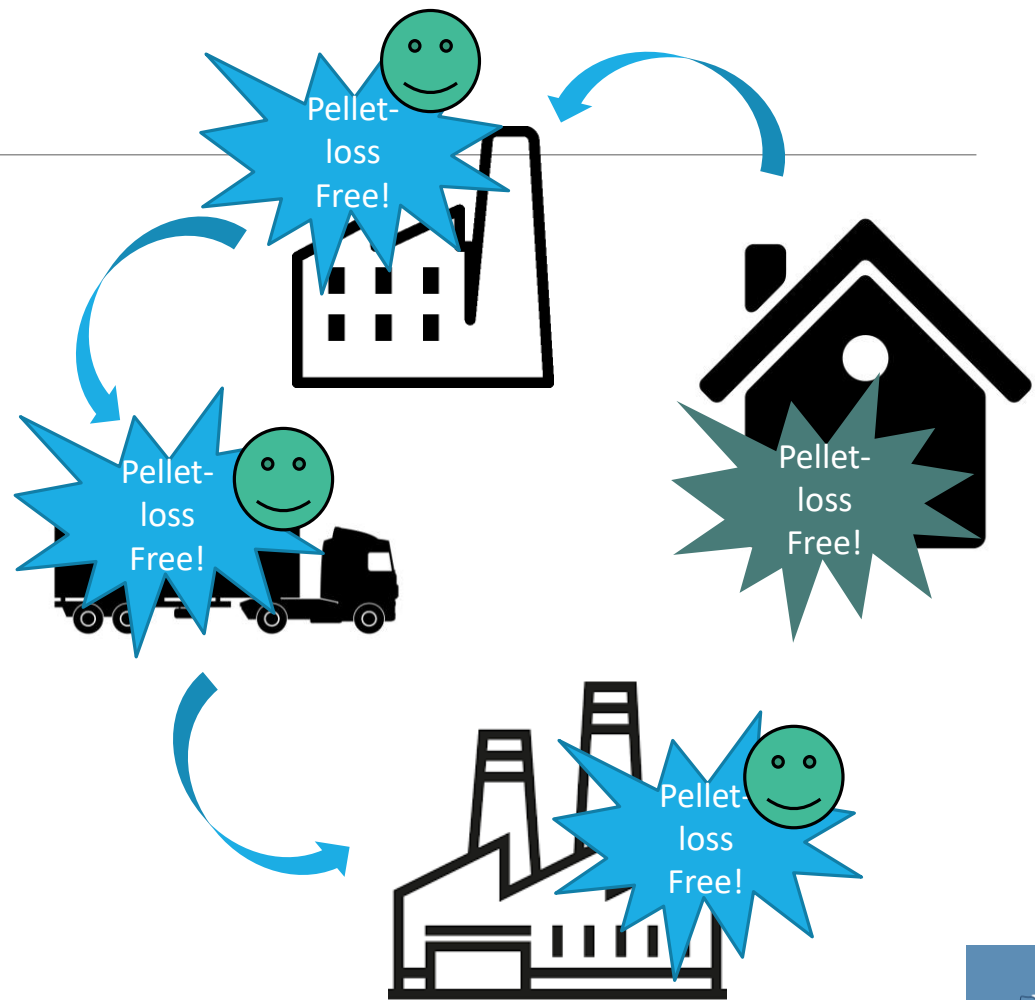


- Best Practice Measures
- Checked by External auditors
- Communicated throughout Supply Chain
- Brands putting products on the market can show their supply chain is pellet loss free



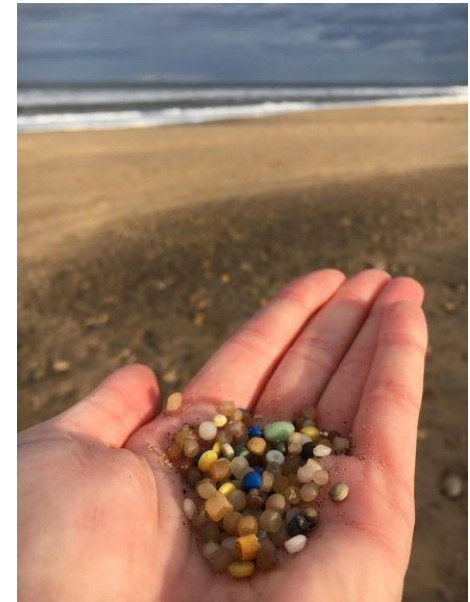
What can the construction industry do?

- The Construction sector is the second highest user of plastics after packaging.(BPF,2019)
- Customers -> buying power
- Ask questions down the supply chain
- Are your plastic products made pellet loss free?



We're looking for industry champions!

- Help us to understand the industry
- Ask questions down your supply chain
- Get involved with trials
- Come and chat to us





Fidra

Thank you!

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