



SMARTER WASTE REGULATION AND POLLUTION CRIME ENFORCEMENT

12-14 November 2019 | Brussels, Belgium





SMART
Waste

Initiatives to Understand and reduce waste crime



Prepared with the contribution of the LIFE
financial instrument of the European Union





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Tools, Techniques & Technology

Lorna McIver

Prepared with the contribution of the LIFE financial instrument of the European Union



Problem Solving Tools, Techniques and Technology



We cannot solve our problems
with the same thinking we
used when we created them.

Albert Einstein

quotefancy

Approach



STRATEGY

TACTICS

Understand Waste Crime



Open Source



Remote sensing



Financial investigations



Waste crime indicators



Competitive behaviours

Future Waste Crime Threats



Horizon scanning

Design Effective Interventions



Intervention design

INTERVENTION ACTIONS

www.lifesmartwaste.com



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When to use the tools



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Horizon scanning



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Horizon scanning



1980

China began importing secondary raw materials & became world's largest importer of recyclables.



Horizon scanning

2013

Reduction plastic waste accepted -Chinese Green Fence campaign - shipments turned away and sent back to the source countries.
Little infrastructure exists elsewhere to manage the rejected waste

2014

Announcement No. 80 of 2014 – Adjustments and revisions to what cannot be imported

2018

In January scrap items prohibited
Announcement No. 39 of 2017

In April another import ban 16 waste types by end 2018 and further 16 by end 2019



Horizon scanning: 9-Step Model



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Horizon scanning Workshop



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Competitive Behaviours Toolkit

Erik MacEachern
SEPA

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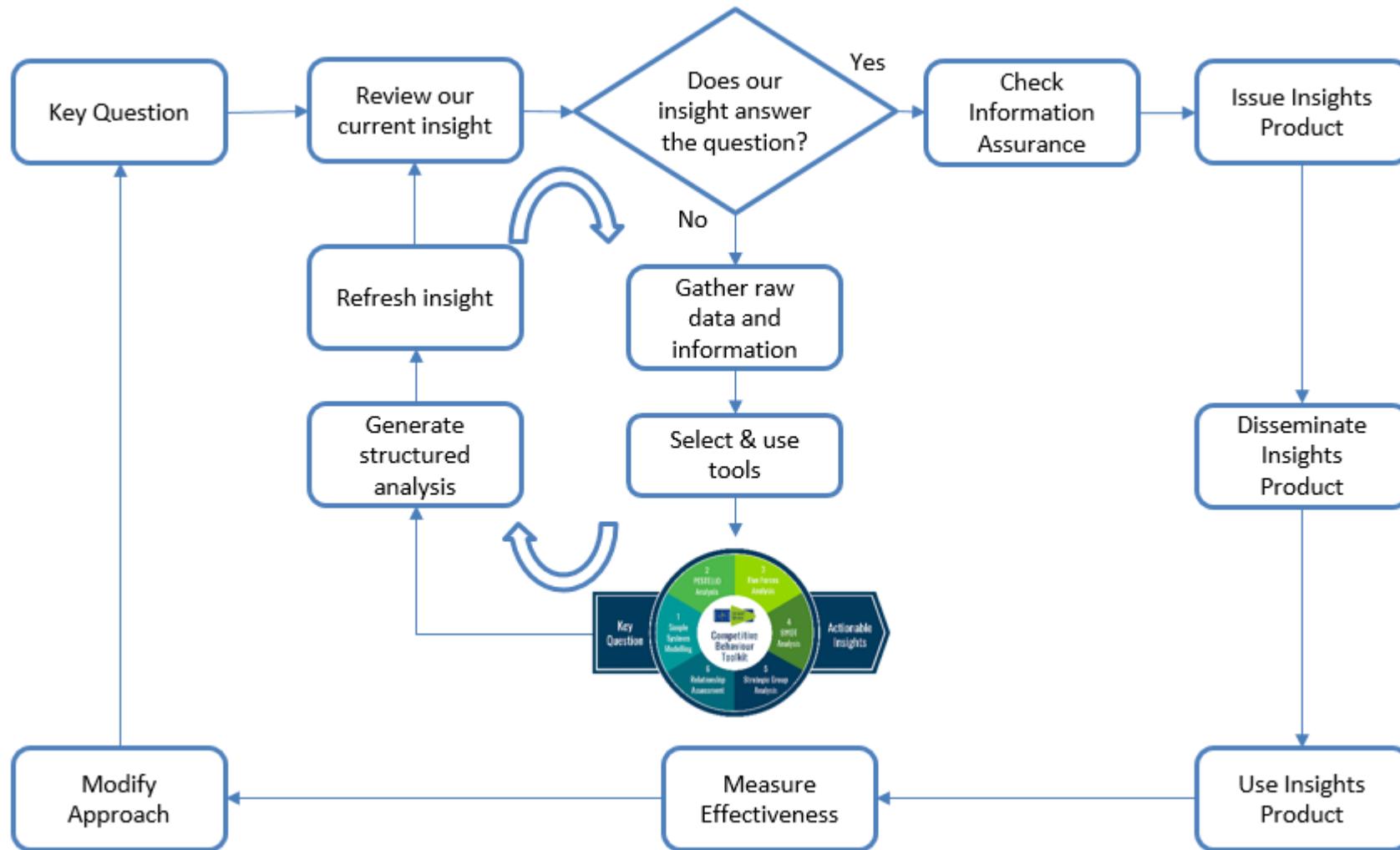
Competitive behaviours toolkit



Competitive behaviour toolkit



Life cycle - continuous improvement



Tool selection framework



To do this	Use this tool
Visually describe our understanding of events and the patterns of behaviour resulting in the events, and also to help us see the underlying structure responsible for the patterns of behaviour.	Simple Systems Modelling
Identify and understand the key external drivers of change in an industry, market or sector.	PESTELLO Analysis
Identify and understand the competitive forces which influence the patterns of behaviour of a particular organisation, business or activity.	Five Forces Analysis
Identify how external opportunities and threats might be addressed, taking in to account the strengths and weaknesses of the organisation.	SWOT Analysis
Analyse, classify and understand the evolving structure of an industry, market or sector.	Strategic Group Analysis
Analyse, classify & understand evolving organisational relationships with operators and industry sectors.	Relationship Assessment

Key Questions - examples



Waste brokers

- “How is the waste brokers sector vulnerable to non-compliance and waste crime?”

Tyres

- “How is the waste tyres sector vulnerable to non-compliance and waste crime?”

Aquaculture

- “What are the competitive dynamics and potential vulnerabilities in the fin fish aquaculture feed production supply chain?”

Shipping

- “What are the vulnerabilities leading to environmental and health and safety non-compliance and illegality in beaching of end-of-life ships”



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Remote Sensing: Detecting (illegal) waste materials within complex environments

Samantha Lavendar,
Pixalytics Ltd



Remote Sensing



www.lifesmartwaste.com





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Intervention Design

Adrian Evans
Natural Resources Wales



Find out more



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LIFE SMART Waste project



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UK Waste Tracking Project

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