Evaluation of Waste Crime Enforcement Interventions

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How the waste industry works

Waste Producers

5.7 million private sector businesses

27.2 million households

4.2m tonnes Waste export

Waste Exports

Waste Managers

Waste recovery & disposal

203m Tonnes of waste managed
£4.8 billion Revenue of top 5 UK waste companies
£6.8 billion Gross value of industry in UK
120,000 Jobs in the waste industry

Waste Crime

£600m
Cost to UK economy from waste crime

Approximately 600 known illegal waste sites, 100 organized crime groups

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ESAET
Environmental Services Association Education Trust
Reg. Charity No.1118486

Waste Crime:
Tackling Britain's Dirty Secret

eunomia research & consulting

A report commissioned by the Environmental Services Association Education Trust (ESAET), written by Eunomia Research & Consulting

Rethinking Waste Crime

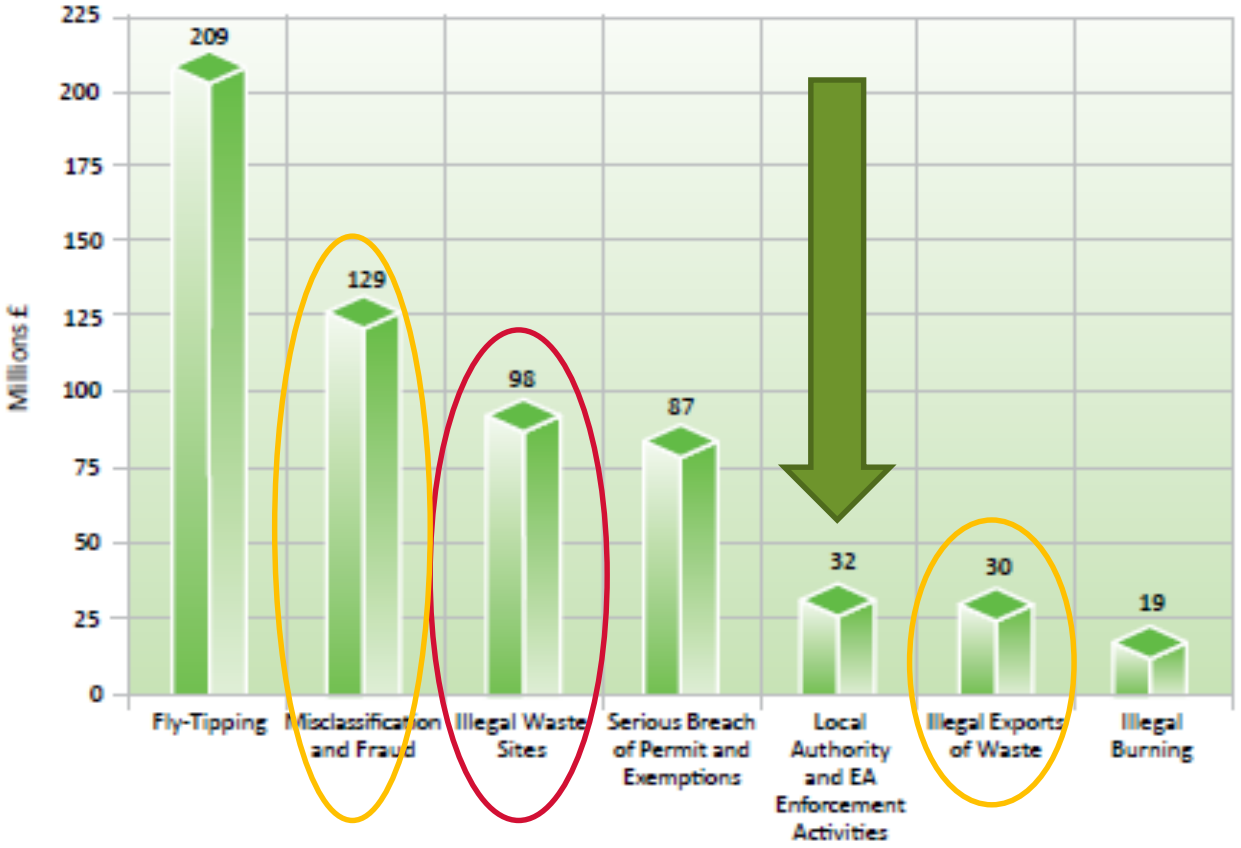
ESAET
Environmental Services Association Education Trust

Written by:
eunomia

esa environmental services association

Supported by:
waste place

***Figure 1**: Estimated Economic Impact of Waste Crime in England (2015)*



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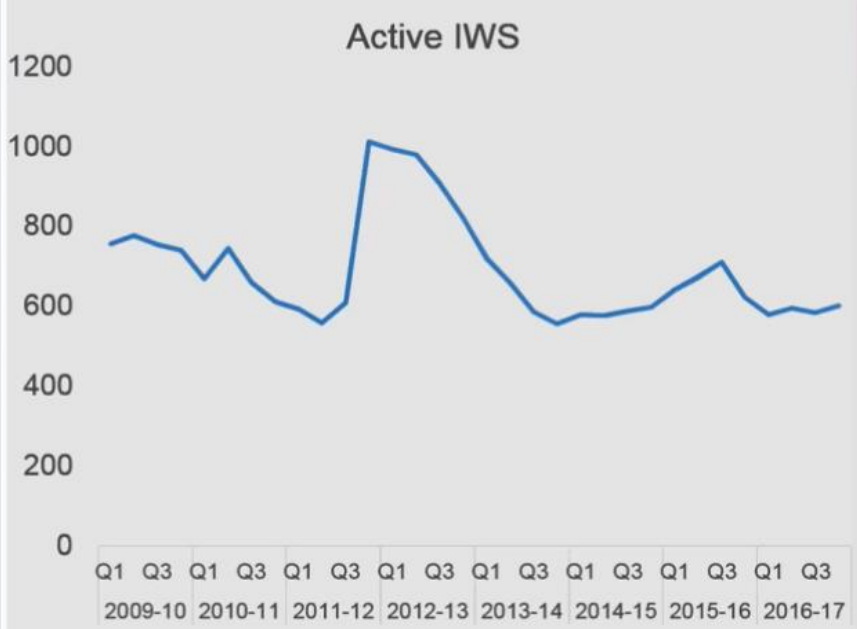
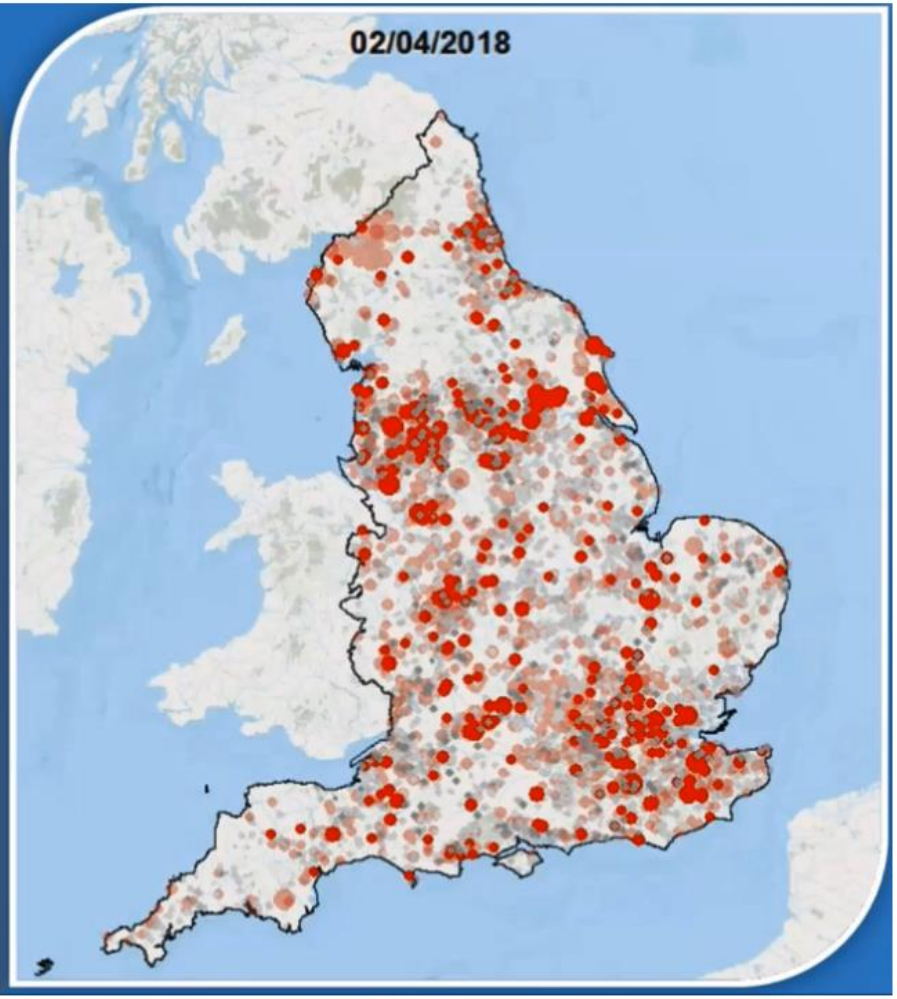
Illegal Waste Sites - Distribution

Illegal waste sites animated over time





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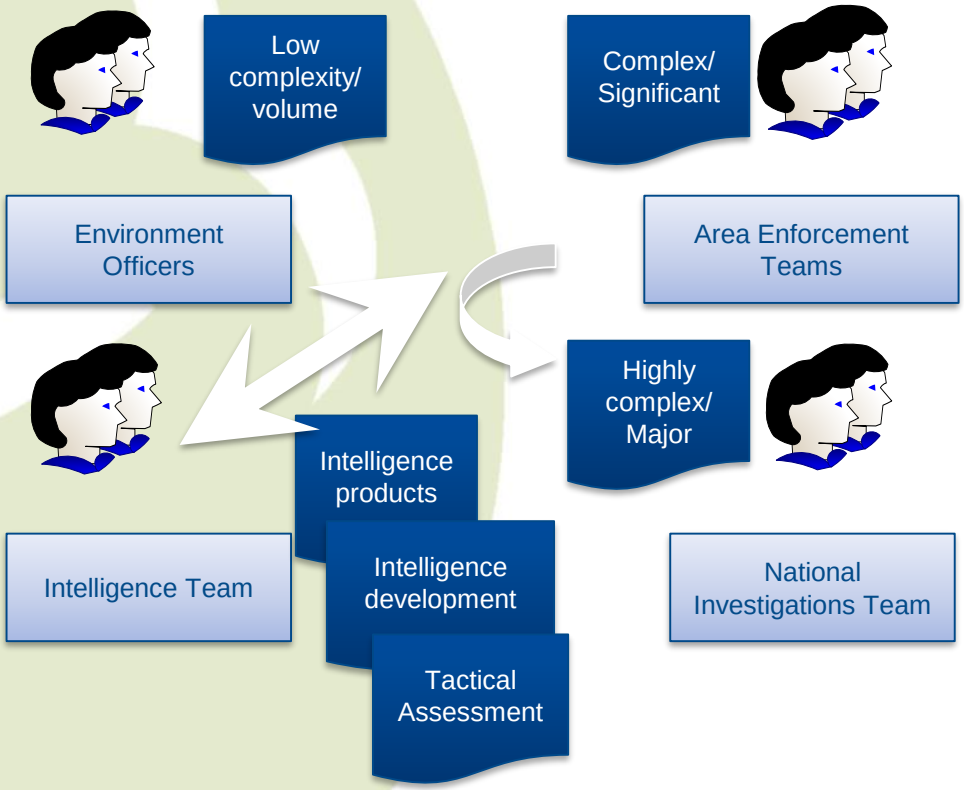
Current Operational Enforcement Model

- **National Enforcement Service, including a National Intelligence Team and National Investigations Team, and 14 Area Enforcement Teams – around 225 FTE / approx. £15.5m per year**

- **Recent project history:**
  - **Pre-2011 - WCIP, BREW and EPOW**
  - **2011-14 – Illegal Waste Sites Taskforce project**
  - **2014-2016 – Waste Crime Intervention & Evaluation project**
  - **2017 -2022 – Additional Waste Crime Funding Programme**



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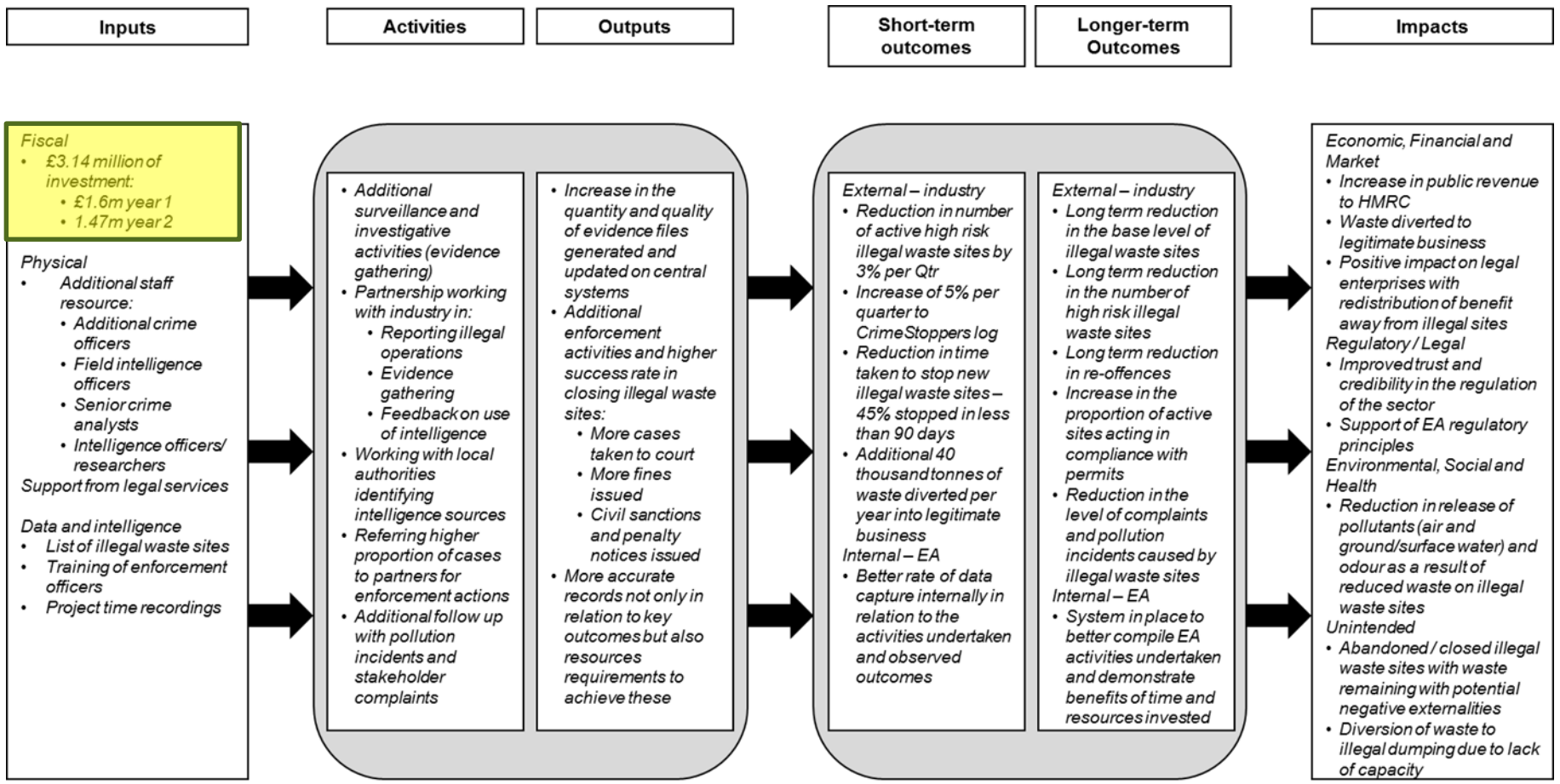
Waste crime intervention

Illegal waste sites – 2014 to 2018

- Gather intelligence
- Advice and guidance
- Bring sites into regulation
- Enforcement activity
- Raise awareness

- Supplementary Investment - £6.1m over 4 years

Illegal Waste Sites – Intervention Logic Model



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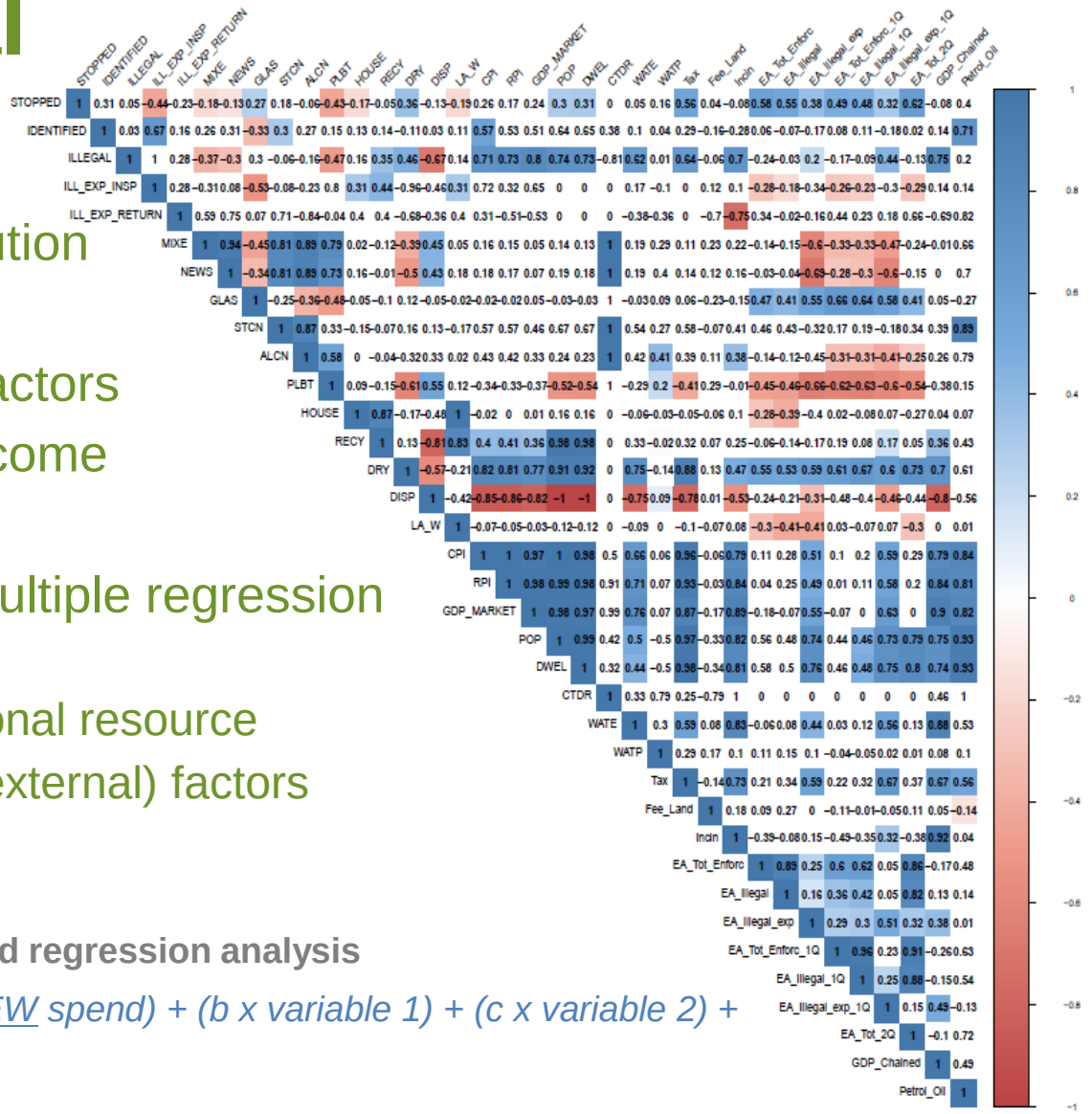
Counterfactual

- Essential – provides attribution
- Statistical analysis of the factors which might affect the outcome
- Correlation analysis and multiple regression modelling to identify:
  - The influence of our additional resource
  - The significance of other (external) factors



Equation used for the multiple weighted regression analysis

Counterfactual outcome = C + (a x EA NEW spend) + (b x variable 1) + (c x variable 2) + (d x variable 3) + (e x variable n).

Where C = Intercept

a, b and c = the correlation coefficient calculated for each variable

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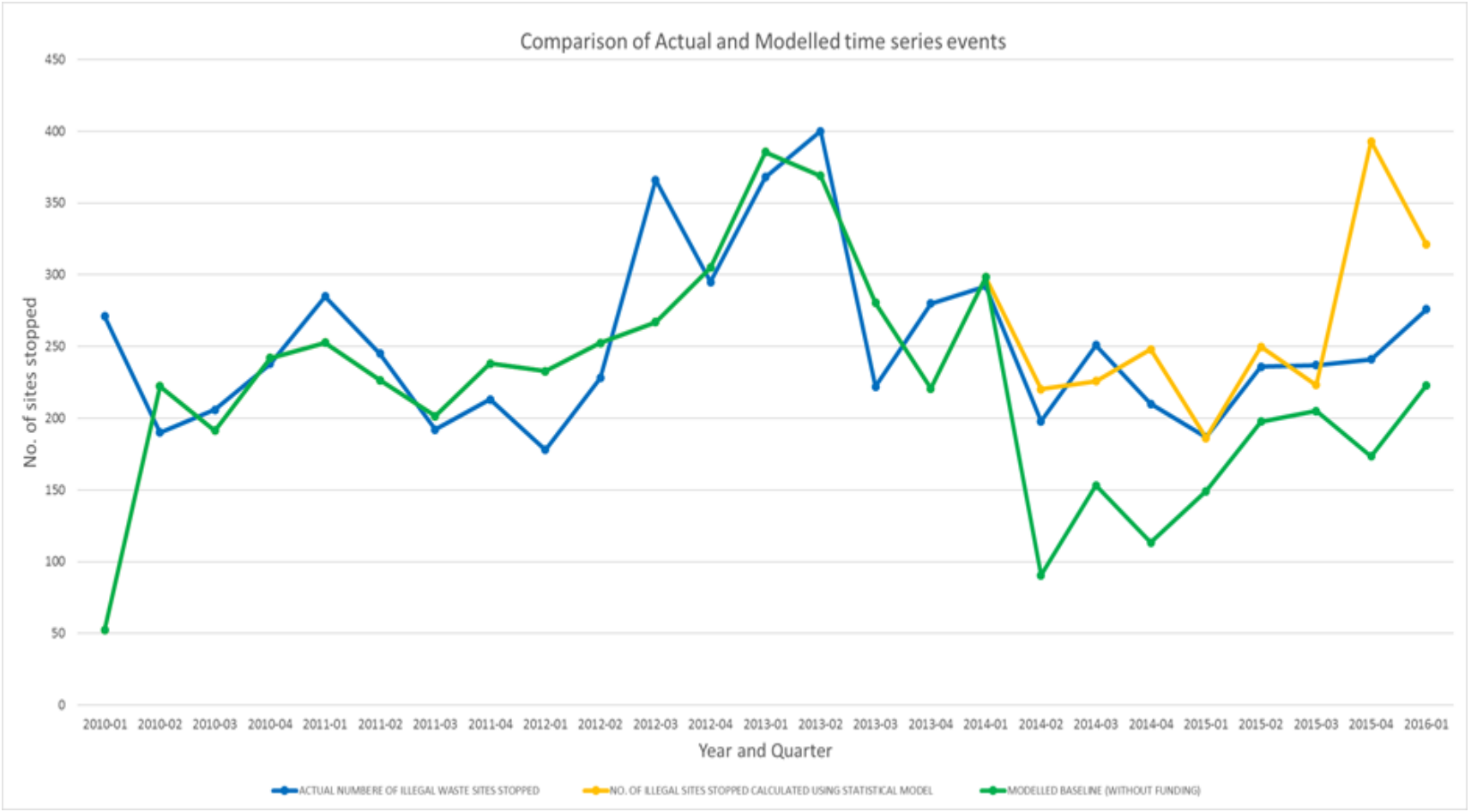
Impact of funding: Illegal Waste Sites



530 additional Illegal sites were stopped as a result of £3.14m investment in enforcement during the intervention period (a 41% increase). These would have contained approx. 429,000 Tonnes of waste

Potential benefits >£10.6m

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Factors that hinder effectiveness of an intervention

- Displacement: Positive outcomes from an intervention are offset by a negative outcome somewhere else

  → Our closing an illegal site is countered by the opening of another one, especially by a repeat offender

- Substitution: The beneficial effects of an intervention on an individual or group are realised at the expense of other individuals or groups

  → Stopping the activities of one waste criminal is countered by another who takes his place.

- Deadweight: The intervention supports outcomes which would have occurred anyway.

  → We ‘stop’ waste crime which had run its course anyway (for example we ‘close’ an illegal site which the criminal had decided to stop using because it was full).

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Noel Review Recommendations:

- “The Joint Unit for Waste Crime should be established”
- “The Environment Agency should be equipped with… tools and powers to pursue and disrupt organised crime”
- “Waste…legislation should be amended to allow for more effective prevention and disruption…..”
- “Waste producers should be held accountable for the destination of their waste…..” (Duty of Care)

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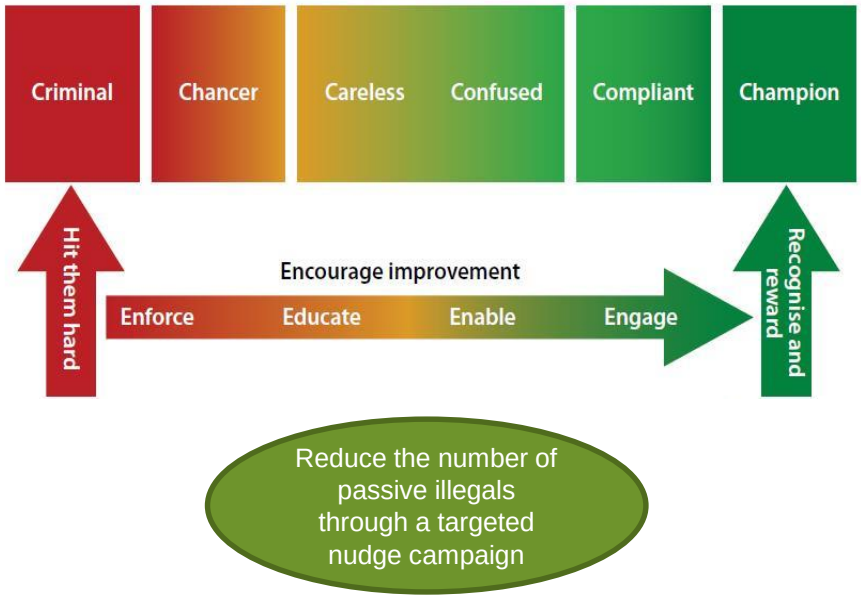
“Commit 2 Legit” – A campaign to convince passive illegal waste operators to permit or quit

- Trialling a communications based intervention



- Our insight tells us:
  - Generally men, low literacy. Wife/partner runs paperwork.
  - Don’t know what we do – confuse us with council
  - Lack deterrence “I went 15 yrs before you guys visited!”
  - Find our language impenetrable “talk plain English!”
  - Laugh at us “why aren’t you catching us all on Facebay?!”
  - Just want to get on with the job, minimum aggro

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Department
for Environment
Food & Rural Affairs

Make it EASY	Make it ATTRACTIVE	Make it SOCIAL	Make it TIMELY
Allowing people to 'go with the flow' by removing or reducing effort, steps, choices to make action simple and effortless	Presenting benefits in a way that maximizes perceived value. This includes increasing the salience of your offer	Harnessing social / peer 'pressure' by showing desired behaviours are supported by others in a social group and encouraging shared commitments	Prompting when people are likely to be most receptive and structuring/phasing benefits to make them more immediate

Running a local car breakers?

It's a **criminal offence** to collect, carry, store or break vehicles without an **environmental permit** – even if you're doing it off the back of a truck.

Most breakers in this area have a permit.
Are you one of the few that don't?

Don't lose it all. **For free advice and a fresh start call 03708 506 506** or google 'elv guidance'.

Show us **you're** trying and **we'll** help you all the way.

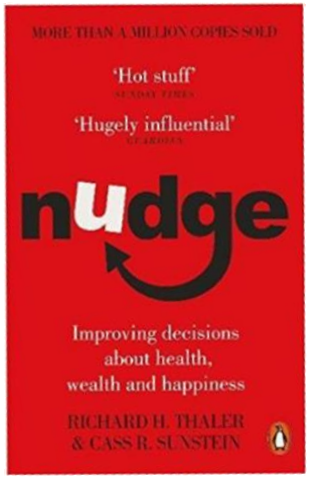
Don't think you're a car breaker?

Removing parts like batteries, wheels and cats still counts as **breaking**. By law you must have an **environmental permit**.

You've already invested in **your business**.
Don't **lose it all** by forgetting the paperwork.

For free advice and a fresh start call 03708 506 506
or google 'elv guidance'.

Show us **you're** trying and **we'll** help you all the way.



Trial design

- Audience insight through semi-structured interviews
  - Identify potential messaging
- Intervention and control areas

- Pulsed messaging
- Impact detected through permit / exemption applications and our contact centre

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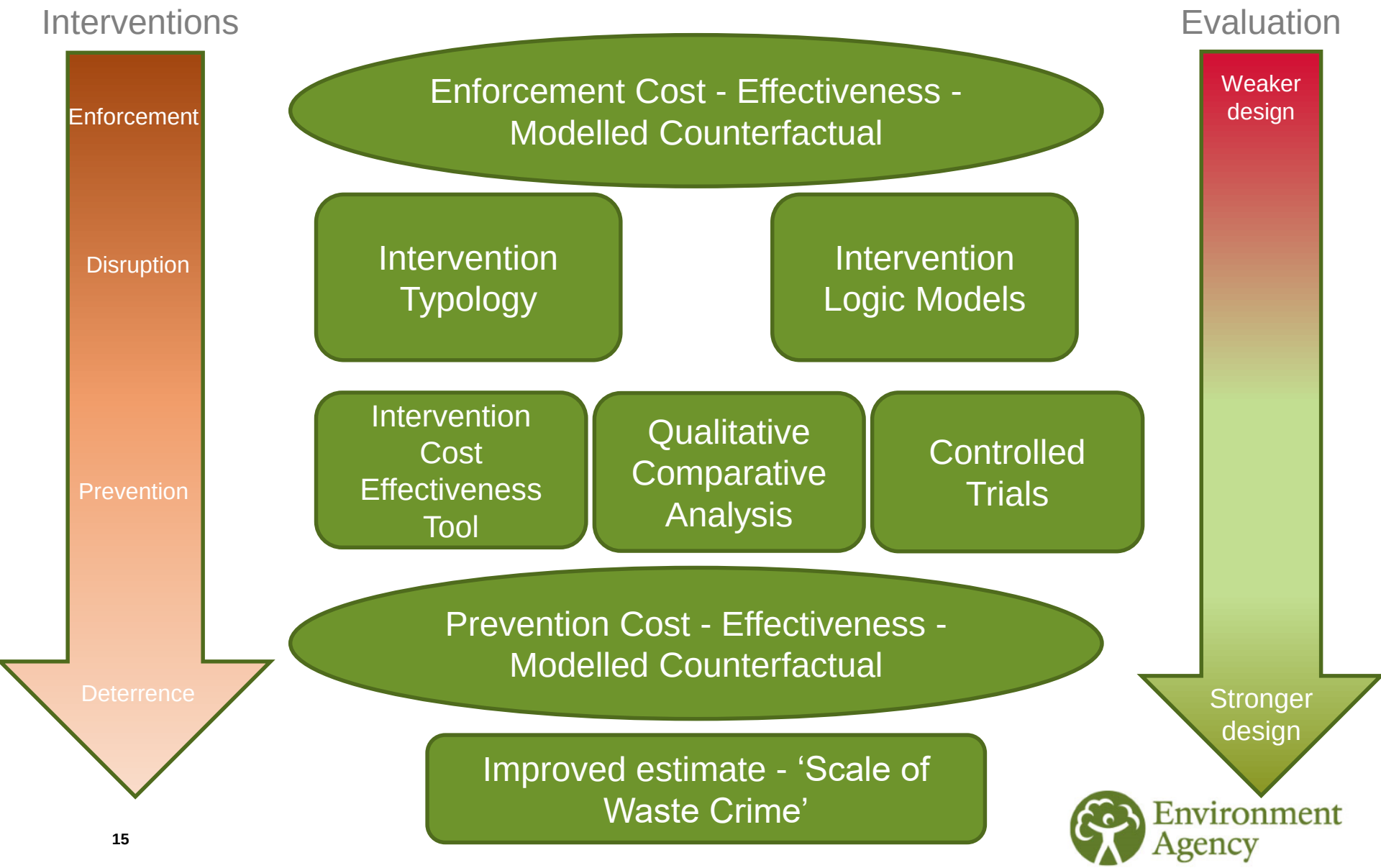
Developing evaluation framework



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