Resource Taxation UK – Aggregates and Landfill

Green Budget Germany Conference on Resource Taxation

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Presented by:
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Overview

– Background
– Description
– Effects
Background

- **Golden period for environmental taxes** (announced work to be conducted in 1997 budget)
- **Orthodox views of Defra / HMT economists**
  - Seek to ‘internalise externalities’
  - London Economics commissioned (1998, Phase 1)
  - Second study to compensate for issues with first (1999)
  - .. With international peer review panel (£1.80 ish per tonne)
- **Trade body for aggregates (QPA) opposing the tax**
- **QPA sponsored work (ECOTEC, Prof Pearce)**
- **Objectives**
  - reduce demand for aggregates and encourage recycling
  - compensate for environmental externalities caused by quarry activities
Description (1)

– Introduced in 2002

– Applies to aggregate:
  – sand,
  – gravel
  – rock

– Exceptions:
  – materials such as clay, slate and shale (not strictly aggregates but used for similar purposes)
  – minerals (e.g. for industrial use) whose extraction involves the extraction of stone, gravel or sand;
  – coal, metals and peat.

– Exemptions
  – ‘Dimension stone’
Description (2)

- **Applied to materials:**
  - quarried in the UK;
  - mined underground in the UK;
  - dredged from UK waters; or
  - imported into the UK.

- **Rates:**
  - £1.60 per tonne to April 2008
  - £1.95 per tonne from April 2008
  - £2.00 per tonne from April 2009
  - £2.10 per tonne from April 2010

- N.I. aggregate levy tax relief scheme
  - 80% relief if registered with HMRC
  - Commits to env improvement
Description (3)

– Taxable event – the earliest of
  – physical removal from the site where it was extracted (except when moved to another site which is registered in the same name as the originating site);
  – sale to another person;
  – use for construction purposes; or
  – mixing with anything which is not chargeable aggregate or water.
Description (4)

– Revenues
  – Collected by HM Revenue and Customs (formerly HM Customs and Excise)
  – Commercial extractors register with HMRC

– Use of revenues
  – 0.1% reduction in employer NICs
  – Revenues in Aggregate Levy Sustainability Fund (fixed sum of £35 million per annum)
Effects

– Just over £1 million to administer
– Revenue around £350 million
Revenue (£ millions)

Source: HMRC
Extraction (tonnes)

Source: HMRC
Use of Primary Aggregates in Construction, GDP and Construction Output

Source: BDS
Intensity of Use of Primary Construction Aggregates

Source: BDS
Explanation (1)

– The first stimulus to aggregates recycling came from the landfill tax
  – £2.00 for lower rate (usually ‘inert’) materials
  – Included soils, rubble, stones, bricks etc.
  – Previously accepted free of charge
    – Site engineering
  – New fees stimulated
    – Use of inert wastes in ‘recovery’ activities (not all of it strictly legal)
    – On-site re-use
    – Crushing of aggregates for use as recycled aggregate

– Incentive came through desire to avoid increasing disposal costs
Explanation (2)

- The second stimulus to aggregates recycling came from the levy
  - Economic incentive at the front end
  - Relatively high (compared with other countries) tax rate (approx 20% or more of price, used to be 30%)
  - Increases diversion of waste already ‘not being landfilled’ into aggregates recycling ...
  - Shifts demand in favour of secondary (subject to standards)
  - ... as well as stimulating additional activity

- Incentive came from desire to avoid higher costs of purchase
Extraction (tonnes)

Landfill tax introduced Autumn 1996
## Recycling of Aggregates

<table>
<thead>
<tr>
<th>Period</th>
<th>Total New Recycling Plants in Period</th>
<th>Average New Recycling Plants in Period</th>
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<tbody>
<tr>
<td>1990-96</td>
<td>109</td>
<td>16</td>
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<tr>
<td>1997-2001</td>
<td>164</td>
<td>33</td>
</tr>
<tr>
<td>2002-2006</td>
<td>163</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: BDS
Key Points

– Aggregates not widely traded
– … but NI scheme to cater for border effects
– Importance of complementary instruments
  – Landfill taxes
    – Encourage avoidance of disposal
  – Specifications to give confidence - Quality Protocol (funded from ALSF)
    – When does ‘waste’ become a product
    – Gives end-users confidence
    – Bolsters demand