16TH GLOBAL CONFERENCE ON ENVIRONMENTAL TAXATION

Green Fiscal Reform: Protecting our Natural Resources for a Sustainable Future

23-26 September 2015. University of Technology Sydney
Economic Instruments in NSW Pollution Law: A Case for Greater Use and Refinement

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Introduction

• Focus on NSW Pollution Laws
• 1960s-1970s: first generation pollution laws
  • ‘Command and control’ regulation
• 1990s: reform
  • New regulator: NSW Environment Protection Authority (EPA)
  • Second generation pollution laws
    • More innovative and flexible measures eg economic instruments
    • Centrepiece = *Protection of the Environment Operations Act 1997* (NSW) (‘POEEO Act’)*
Economic Instruments in NSW Pollution Law

- Paper considers use of economic instruments under POEO Act:
  - Economic instruments in licensing:
    - Licensing fees:
      - Load-based licensing (LBL)
      - Risk-based licensing (RBL)
    - Emissions Trading Schemes
  - Monetary benefits orders - criminal sentencing
Licensing fees

- When is a licence required under the POEO Act?
  - ‘scheduled activities’ = listed in Schedule 1
  - Non-scheduled activities which pollute waters
- Issued by EPA
- Licensing fees have two components:
  1. Administrative licensing fee. Dependent on:
     - Activity
     - Environmental management performance
  2. Load-based licensing (LBL) fee
- Both fee types contain an economic incentive to improvement environmental performance
Load-based licensing (LBL)

- The more pollutants discharged, the higher the fee → polluter pays principle
- Applies to specified activities and pollutants
- Fee also dependent on:
  - Environmental harmfulness of pollutant
  - How sensitive receiving environment is
- Must also comply with licence discharge limits
How effective is LBL?

- Limited assessments of effectiveness
- Mixed success stories:
  - Effective where pollutant can be *diverted* to another beneficial use
    - eg STP effluent → fertiliser
  - Effectiveness more questionable / uncertain where *cleaner technology needs to be implemented*
    - Are the fees too low?
    - Do they cover enough pollutants?
    - How do we determine the impact of LBL as opposed to other factors?
Risk-based licensing (RBL)

- RBL part of general move to risk-based regulation of licensees in NSW pollution law
  - Target higher risk licensees
- Under RBL administrative licence fee amounts vary based on licensee’s environmental performance
- Environmental management categories (EMC) ranked A-E (best→worst performers)
  - Based on a scoring system
  - ‘bad behaviour’ eg prosecutions, clean-up notices → points allocated
  - ‘good behaviour’ ie environmental management systems, environmental improvement works and programs → points deducted
- Higher scores → worse EMC → higher admin licence fees
  - Category A = 5% discount
  - Category E = 2 x base fee (base fee range = $610 to $323,000)
Design problems

- New scheme → effectiveness in practice unknown
- BUT design flaws:
  - Disproportionate and perverse fee increases
  - Flat score reductions for environmental improvement works
    → compromises effectiveness as an incentive mechanism
Emissions Trading Schemes (ETS)

- Only 2 implemented
- Introduced *before* POEO Act commenced. Continue under POEO Act
- Limited by:
  - Geographical area
  - Single pollutant ‘type’
South Creek Bubble Licensing Scheme

- Introduced 1996
- Western Sydney – South Creek
- Three sewage treatment systems
- Licensed to Sydney Water Corporation
- Scheme regulates nutrients – nitrogen and phosphorus
  - Target = reduce phosphorus 83%, nitrogen 50% by 2004
- Total combined discharge limit for the three systems
  - Adjust discharges at least cost
Hunter River Salinity Trading Scheme (HRSTS)

- Hunter River = high natural salinity
- Salt water discharges from commercial activities increase salinity $\rightarrow$ adverse impacts
- Conflicts arose – irrigation versus mining
- Traditional licensing not working
- ETS introduced
  - 1995 – pilot commenced
  - 2002 – regulations
How does the HRSTS work?

- Salinity discharges in accordance with scheme
- Based on natural river flows:
  - Low flows: no saline water discharges
  - High flow:
    - Total allowable discharge amount (TAD) determined
      - maintain salinity targets:
        - 900EC in middle and lower sectors
        - 600EC in upper sector
    - Discharge part of TAD in proportion to credits
    - Trading of credits
  - Flood flows:
    - Unlimited discharges
    - River salinity to be kept below 900EC

Source: EPA website
Has the HRSTS been successful?

- Achieved salinity targets
- Focus on cumulative impacts
- Flexibility for licensees
- Problems:
  - Inability to utilise full credit entitlements
  - Impacts on credit value and price signals
Is there potential (and willingness) for greater use of ETS?

- Precedent for other ETS
- But is the EPA willing to use them?
- Cumulative impacts not properly accounted for in traditional licensing system → potential for ETS?
- Should be considered as an option (but may not always be the best response)

Some factors to consider:
- Multiple polluters, same pollutant
- Good background knowledge
- Pollutants easily measurable – ‘real time’ modelling
- Set goals
Monetary benefit orders (MBO)

- MBO
  - Additional penalty in sentencing polluters
  - Amount of monetary benefit acquired by committing offence
  - Prevent financial gain
- No MBOs sought/made
- When will they be sought?
  - EPA Guidelines for Seeking Environmental Court Orders:
    - Benefit quantifiable
    - Sufficient funds to pay
Case examples

*Environment Protection Authority v BMG Environmental Group Pty Ltd [2012] NSWLEC 69*

- Forensic accountant evidence
- Potential financial benefit = $227,000
- No MBO sought, no evidence of lack of means to pay
- Fined $100,000 each for company and director plus EPA’s legal and investigation costs approx $175,000 total
- Effectiveness as a general deterrence mechanism without MBO?
**Case examples**

- *Environment Protection Authority v MA Roche Group Pty Ltd [2015] NSWLEC 29* (‘Roche No 2’)
  - Related case: *Environment Protection Authority v MA Roche Group Pty Ltd [2014] NSWLEC 114* (‘Roche No 1’)
- Quarrying operation – breach of licence condition – over permissible tonnage limit
- Done knowingly or deliberately
- Financially motivated
  - Offset financial problems, keep business afloat
- Roche No 2
  - $52,000 fine
  - $50,000 estimated financial benefit
  - $net penalty = $2,000
- Questionable deterrence in absence of MBO
Conclusions

- Economic instruments utilised to varying degrees and with mixed success in NSW pollution law
- Factors affecting ability to act effectively as economic incentives to improve environmental performance
- LBL
  - More effective where pollutants diverted to beneficial use than where clean technology needs to be implemented
  - Fees too low?
- RBL – design flaws → needs improvement
- ETS – successful, but limited use → potential for greater consideration/use
- MBOs – important deterrent function – need to be used
- Final thoughts:
  - Economic instruments capable of beneficial env outcomes
  - Reform needed to make more effective
  - Further consideration to harness to greater extent
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