

# Integrated Appraisal of Options to Mitigate the Effects of the End-of-Life Vehicle Directive on Last Owners in Wales

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**The author looks at one of the key challenges of sustainability—how “sustainable” is a particular policy and how can we go about assessing sustainability? Using the management of end-of-life vehicles as a case study, he discusses a relatively new tool that PB used to do this, and lessons learned in the process.**

The European Union’s End-of-Life Vehicle Directive (2000/53/EC) came into force on 21 October 2000, with a view to improving the waste management of scrapped cars, or “end-of-life vehicles” (ELVs) (Figures 1 and 2). Its main features are the:

- Banning of certain substances in vehicles (e.g., lead)
- Requirement that ELVs and waste parts be collected and transferred only to permitted facilities for treatment
- Introduction of progressive reuse, recycling, and recovery targets
- Stipulation that producers (manufacturers) are responsible for taking back all ELVs from 2007.

The government considered a range of options for how to fund the stricter dismantling and recycling requirements until 2007, when manufacturers become responsible, but in the end decided that in the interim last owners would be responsible for any costs arising from disposing their vehicles. Such a decision could have important social and environmental consequences. Amongst the least wealthy motorists, one third of their vehicles are over 10 years old, suggesting that these motorists will be more likely to incur the costs of disposal.

The National Assembly for Wales examined a number of options to try and minimise these impacts, particularly upon last owners. In February 2003 PB and its partner, Sd3, were commissioned by the Assembly to conduct a sustainability appraisal of the options and recommend the most suitable ELV delivery programme to allow Welsh Assembly Government Ministers to make an informed policy decision.

## The Challenge of Assessing Social, Environmental and Financial Impacts

**Figure 1: End-of-Life Vehicles Pending Disposal**



**Figure 2: Abandoned Vehicles Pending Collection by Local Authority**



There were originally seven mitigation options put forward by the Assembly. They were not mutually exclusive of each other, and they were not in a form that readily enabled direct comparison. In agreement with the Assembly, we reorganised the options into key stages in the management of ELVs:

- Notification (letting someone know that an ELV exists)
- Transportation (getting it to the recycling depot)
- Storage and disposal (primarily in relation to funding mechanisms, i.e. grants to upgrade dismantling facilities on condition that they receive ELVs free of charge).

These key stages were divided further into a number of options to allow assessment and comparison. This approach also enabled the key elements of the options to be presented and used in a questionnaire directed at a targeted number of key stakeholders.

Our big challenge was to come up with a robust approach for assessing the key potential social, environmental and financial impacts of the proposed options. Whilst there is a worldwide shift towards sustainability, there are huge difficulties in defining and applying the concept. There are workable methods for economic assessment, a basic framework for environmental assessment, and crude social assessment methodologies, but unless these are put together into some kind of integrated assessment it is very difficult to judge how far a proposed policy or plan is “sustainable” or is not.

An emerging trend is the development of “checklist” style integrated appraisal tools—a set of questions or criteria organised around impact categories that address economic, social and environmental concerns. Whilst these approaches are useful for screening potential impacts, they stop short of providing advice on how more detailed, in-depth appraisal might be undertaken should it be deemed necessary.

There are several emerging integrated appraisal tools available that advocate more detailed impact investigation. The team adopted one such tool, Integrated Policy Appraisal (IPA), a relatively new tool developed by several government departments. In fact, at the time of the project the tool was not in general circulation and was provided to PB only because of the nature of the project.

Given the holistic nature of the appraisal, the team used additional tools to support the IPA. The complete set of tools comprised:

1. **Integrated Policy Appraisal**, an initial screen at which the potential impacts of the options were rated against a wide range of economic, social and environmental criteria.
2. **Stakeholder Consultation**, to account for stakeholder opinion and to ensure that an inclusive approach was taken and stakeholders had an adequate understanding of the issues.
3. **Cost Benefit Analysis**, to evaluate the financial impacts. It followed some of the basic principles that are fundamental to whole-life costing.
4. **International Benchmarking**, to establish whether other Member States adopted approaches that bore any similarities to Welsh proposals and whether they mitigated the impacts upon last owners.

### The Appraisal

**Integrated Policy Appraisal.** In essence, integrated appraisal is about gathering the expected impacts of a policy or project. The team brainstormed the impacts associated with the options using the IPA screening checklist and summary appraisal table (Figure 3). Impacts included:

- A possible increase in the number of abandoned vehicles and associated issues (arson, visual and amenity impacts, etc.)
- Effects on last owners

**Figure 3: Integrated Policy Appraisal Screening Checklist and Summary Table—Social and Economic Impacts**

		Qualitative Assessment	Qualitative Measure(s)
E C O N O M I C	Public Accounts and Public Service	<ul style="list-style-type: none"> <li>• Will the policy or project involve cost to exchequer funds?</li> <li>• Will it result in receipts or savings to the exchequer?</li> <li>• Will it impose administrative or other burdens on public service providers, e.g. frontline staff at health, education, local government or criminal justice?</li> </ul>	Total effect on public spending in next 5 years. Any quantified effect for subsequent years.
	Consumers	<ul style="list-style-type: none"> <li>• Will the policy or project affect the cost, quality or availability of commercially available or publicly-provided goods or services?</li> <li>• Will it result in a change in the choice available to consumers, or the availability of information to enable them to exercise choice?</li> <li>• Will it introduce a new technology or process that will make existing goods redundant over time?</li> </ul>	
	Business	<ul style="list-style-type: none"> <li>• Will the policy or project impose or relieve a cost or burden on business, charities or the voluntary sector?</li> <li>• Will it result in a change in the investment in people, equipment, infrastructure, or other assets?</li> </ul>	
S O C I A L	Public Health and Safety	<ul style="list-style-type: none"> <li>• Will the policy or project enhance or harm safety, or affect the use of leisure environments to maintain or improve health?</li> <li>• Will it affect health-related behaviour such as diet, physical activity, alcohol, tobacco and drug consumption, sexual behaviour, excessive gambling?</li> <li>• Will it affect access to NHS services, including the use of preventative services such as health screening, immunisation, mental health services?</li> <li>• Will it affect the ability of people to return to work from illness (whether the illness is work-related or not)?</li> </ul>	
	Crime	<ul style="list-style-type: none"> <li>• Will the policy or project affect the rate of violent and non-violent crimes?</li> <li>• Will it divert people away from or prevent crime?</li> <li>• Will it affect people's fears about being a victim of crime?</li> <li>• Will it create a new offence or create an opportunity for crime, e.g. through fraud?</li> <li>• Does the policy create new investigative powers that could increase the risk of violence against public sector workers?</li> </ul>	
	Social Capital, Community and Education	<ul style="list-style-type: none"> <li>• Will the policy or project affect the number of people involved in voluntary and community activities?</li> <li>• Will it affect people's access to information or social networks?</li> <li>• Will it affect the availability of affordable homes of suitable quality?</li> <li>• Will it affect the capacity for parents/guardians to provide a stable environment for their children?</li> <li>• Will it affect the level of skills and education in the workforce among children or otherwise?</li> <li>• Will it affect access to, and the range of, facilities for the arts, culture, sports and leisure pursuits?</li> </ul>	

- The provision of adequate facilities (number and location) to process ELVs in accordance with Directive requirements.

Quantitative analysis was carried out where possible, but otherwise a qualitative assessment of the likely impact was undertaken. The team also considered distributional impacts, as few policies affect everyone equally. These included deprivation and income groups, age, regions and localities, rural areas, and small firms—all issues that were very pertinent to this project.

**Cost Benefit Analysis.** This appraisal also supported the gathering of more quantitative data to feed into the cost benefit analysis. The team established a cost breakdown structure related to each ELV option to ensure that the cost elements were readily identifiable within an expected time when they would occur. Discounted cash flow techniques were applied to the total cost estimates such that all future costs were adjusted to represent values in the present.

### Related Web Sites:

- Sustainable Development in Government—Integrated Policy Appraisal: <http://www.sustainabledevelopment.gov.uk/sdig/integrating/index.htm>

### Acknowledgments



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The appraisal also considered the constraints and influences that could significantly affect the choice of option. These include the legal framework specifically for ELV legislation, and constraints such as s51 of the Environmental Protection Act 1990 that prevents local authorities from disposing of waste directly other than through contract. Legal advice was provided to the team by the National Assembly's lawyers on aspects such as powers available to the Assembly. For example, what mechanism could they use to provide a certain grant?

There was also the narrow timeframe to 2007 and the actions and initiatives of stakeholders such as changes to vehicle registration requirements and the economic climate of ELVs in processing costs and commodity value. Again these constraints and influences were all valuable tools and tests in the overall evaluation and appraisal of the options.

**Stakeholder Consultation.** The key stakeholders were established (i.e. police, local authorities, vehicle dismantling industry, and fire authorities) and their key policies, and objectives were determined. Their relative influence and role was also considered because the value of the stake that different stakeholders have in an issue would clearly impact the value of their responses. For example, local authorities and fire authorities wanted to focus more on abandoned vehicles rather than the actual primary objective, which was to mitigate impacts to last owners.

The objective in designing the questionnaire was to minimise its complexity, making it appropriate for a wide variety of stakeholders, and allowing it to take about 30 minutes to complete. Typically, a consultation of this type could achieve a 40 percent response rate, which we reached after a series of reminder calls and e-mails. Face-to-face or telephone interviews are usually far more revealing and constructive; however, this could not be undertaken within the timeframe and budget we had, and was acknowledged by the team and the client as a weakness.

**Appraisal.** The appraisal took the form of a structured review using comparative assessment of the options by:

- Ruling out any option that had show stoppers for legal or practical reasons
- Giving more detailed consideration of preferred/theoretically viable options with advantages and disadvantages listed, taking into account stakeholder and socio-economic considerations, constraints and influences.

The outcomes of the study together with our recommended option to mitigate impacts to last owners were presented to Welsh Assembly Government Ministers in June 2003. Whilst the results of the appraisal are client privilege, the National Assembly took account of our findings, which were considered within their decision making process.

### Concluding Remarks

The key lesson learned by the team was that it is imperative that the screening of potential impacts, contacts, avenues of information, needs to be carried out as a structured and facilitated team exercise from the outset. This exercise should include any experts who are part of the team and ideally include client representatives to ensure that they are fully on board. Although this did take place, it was not as structured as it could have been and time was wasted in chasing information and contacts, particularly in the closing stages of the project. Having said this, the project was delivered within the tight three-month deadline laid down by the client.

Given that a range of appraisal tools can be used in support of integrated appraisal, it should be viewed as a generic approach and not as a single, discrete tool. The choice of appraisal tools will depend on a range of factors, including regulatory obligations, client and contractual requirements, the nature of the impacts to be investigated, and the characteristics of the tools. IPA provides for a two-stage structured means to reconcile the trend towards "checklist" style integrated appraisal with the in-depth appraisal necessary to fulfill client requirements and facilitate sound-decision making. The key success criteria of any integrated appraisal is whether or not its application has actually influenced the decision and, more importantly, if it led to a more sustainable outcome. ■