Working Party on National Environmental Policy

Budget, Financial and Accounting Issues in Greener Public Purchasing

Report on Workshop held in Vienna on October 29th-30th, 2001

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BUDGET, FINANCIAL AND ACCOUNTING ISSUES IN GREENER PUBLIC PURCHASING:
SUMMARY OF WORKSHOP PROCEEDINGS

1. Background to the Workshop

Support for the use of green public procurement practices was expressed in the OECD Environmental Strategy for the First Decade of the 21st Century, which was adopted by OECD Environment Ministers in and endorsed by the OECD Council at Ministerial level in May 2001 (OECD 2001a). As a contribution toward implementing this strategy, the Draft Council Recommendation attached as an Annex is intended to provide guidance for Member countries as they seek to improve the environmental characteristics of public procurement.

According to recent work in the OECD’s Trade Directorate, government procurement markets in 1997 (excluding compensation of employees) accounted for between 5% and 18% of GDP within OECD Member countries. (See OECD 2001b) Moreover, public sector demand represents an important share of total demand for many products and services which have significant potential environmental impacts, such as buildings and construction, electricity supply, motor vehicle fleets, water supply and sanitation, etc. (See Francois et al. 1996 for data on government purchases as a share of total demand, disaggregated by sector.)

As such, public procurement can be used to bring about direct environmental benefits through the improved environmental performance of public authorities at all levels of government. Perhaps more significantly, it can also yield indirect environmental benefits through the effects that it can have on the economy as a whole. By encouraging the development, commercialisation and diffusion of less environmentally-damaging products and services, government procurement can play an important role in encouraging the private sector to improve the environmental characteristics of their own procurement strategies. In order to capture these opportunities a significant number of OECD Member countries have introduced initiatives to promote greener public purchasing. OECD’s activities in this area date from 1996, focussing on practical issues associated with the implementation of GPP policies and practices (See OECD 2000a).

More recent work has focussed on “financial, budget and accounting” procedures and systems which affect GPP and the environmental characteristics of public procurement more generally. The objective is to explore the means by which reforms in budgetary systems and improved environmental performance can be made to be mutually complementary endeavours. In addition, further work has been undertaken on conditions under which GPP is likely to be an efficient and effective complement to other environmental policy instruments. Indeed, GPP is increasingly used as policy instrument in various OECD member states, but as it is relatively young, its promising elements as well as its limitations need still to be further analysed.

These issues have been addressed in a workshop on “Budget, Financial and Accounting Issues in Greener Public Procurement”, which was jointly organised by the Austrian Ministry of the Environment
and the OECD Secretariat, and took place in Vienna, on October 29th and 30th. It brought together 50 participants from various OECD member countries, including budget and procurement officers and officers from environmental policy agencies. Four background reports and six country-reports on GPP were presented at the workshop and the main issues were discussed in break-out sessions. The meeting was chaired by Bob Ryder of the UK Department for Environment, Food and Rural Affairs.

2. Environmental Impacts of GPP policies

The workshop reports and participants distinguished between the direct effects of GPP policies on the environmental performance of public authorities themselves and the indirect effects on the broader marketplace.

2.1 Direct effects

While government expenditure represents about 20% of GDP, public procurement amounts to only some 9% of GDP. Central governments do have the biggest influence on the procurement market, although they only account for one third of total public procurement. Sub-central governments and social security funds account for the two other thirds but do not act as cohesively as a single unit. (Although it was pointed out that in many cases this is also true within central governments.)

In some sectors and for some products, government procurement covers a large share of the market and GPP policies have high leverages. In sectors such as road construction or defence, for instance, the central government is the primary source of demand. Detailed analyses at the sectoral level were not provided at the workshop, although Richard (2001) does provide some figures based upon input-output tables. Shipbuilding, aircraft, community services, communications services and paper products figure largely for a number of countries.

For the local government procurement, more detailed data was available, thanks to a presentation made by the International Council for Local Environmental Initiatives (Plas 2001). ICLEI has identified the importance of local government procurement for different goods. They found that energy, IT equipment and buildings had high importance, that person transport, furniture or food had variable importance, and that white goods and paper had only limited importance in local government procurement.

Clearly some of these sectors are environmentally significant and efforts to improve the environmental characteristics of goods and services procured from these sectors could have positive environmental consequences. Indeed, one of the country-reports (Klausbruckner 2001) provided detailed evidence of the importance of improved procurement practices for Vienna hospitals.

In addition, it was emphasised that some of the benefits may be less readily quantifiable in nature. For instance, awareness of the environmental characteristics of procurement may result in more general improvements in operations and management, yielding further environmental improvements.

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1 The larger figure includes not only government procurement but also compensation for employees. Government procurement alone represents 9% of GDP. However, publicly owned enterprises (such as public utilities) are not included in this figure. (OECD 2001a)

2 RELIEF study. This study was carried out in six cities: Hamburg, Kolding, Malmö, Miskolc, Stuttgart and Zürich; the results presented in Vienna are still preliminary.
2.2 **Indirect effects**

While many GPP policies are primarily designed to improve the government’s own performance, such policies may also have impacts on the private sector’s procurement. In some cases these impacts are likely to be positive (i.e. through demonstration effects and induced innovation), while in other cases they may be negative (i.e. through crowding out). The workshop participants discussed some of the conditions under which various impacts are likely to occur.

**Induced innovation**

Public procurement, by increasing the demand for “green” products, can induce cost reductions in the green sector either by allowing for the realisation of economies of scale or by helping firms to shift along their learning curves. This can result in increased diffusion of greens products and services throughout the economy as a whole. Further upstream, public procurement can also encourage innovation.

As such effects occur most often in the production of new products, this means that GPP may be particularly successful when it targets the development and commercialisation of products. Condition for this is a latent demand in the private sector, which means that the private sector must have a reason to adopt the new products. Therefore, one of the results of the workshop was to realise that GPP can be considered an effective instrument in order to “launch” new green products (See Marron 2001).

However, it was pointed out that in many cases GPP policies have not been targeted at such types of goods and services, but rather at more homogeneous products in more mature sectors. Paper was cited as one example. However, in other cases this is not the case. For instance, computer and other electronic products have been targeted in many schemes.

**Demonstration effects**

Public procurement can have positive effects on the demand side, helping risk averse private firms to overcome their wariness to invest in newer (and untried) technologies which have fewer environmental impacts.

For instance, the government can set a good example or prove the effectiveness of green products in terms of specific performance criteria, which are then adopted by private purchasers. Workshop participants from Austria, Switzerland and the US have given evidence of such phenomena (Klausbruckner 2001 and Vallina 2001). In the US, for instance, so called “Pilot Projects” have served to test recycled toner cartridges or chlorine-free paper in governmental agencies and have been proven successful in overcoming people’s unwillingness to use these products.

**Crowding out**

In some cases, GPP policies can trigger counter-reactions in the private sector which can cancel positive effects in the public sector: as prices for the green product rise with increasing public demand, the private sector switches to the brown product – a phenomenon which is known as “crowding out”.

Some participants raised the question whether crowding out was merely a short-term phenomenon. This could mean that the supply of the green product would adjust to a higher demand in the long term and thereby overcome the problem of crowding out. Even, it was suggested that the suppliers
could be flexible enough to foresee an increased demand in the green product and avoid a price increase through higher production levels. Clearly this depends upon market conditions.

3. Conditions for efficient implementation of GPP Policies

The workshop participants identified three key areas required in order to implement GPP in an efficient way: the intelligent use of information and training, the implementation of integrated management systems including senior level management and environmental experts, and the right mix with other policy measures.

3.1 Information and Training

It was widely argued among workshop participants that the use of internet-based information tools leads to greater transparency, greater rationality and more cooperation with other countries. Workshop participants from Finland, the US and Sweden illustrated their experiences with computer-based information programmes for procurement officers. These programmes are set up in order to facilitate both, the product specification phase and the comparison of different tenders.

In Finland, for instance, an internet-programme offers a range of technical specifications for different product groups (Nissinen 2001). These specifications are based on information from eco-labeling criteria, questionnaires to suppliers and research papers. They are supposed to be regularly updated with the revenues from its users. Several workshop participants stressed that information from suppliers was crucial for the design of useful GPP criteria, they also pointed out that cooperation with the industry could help the latter to adapt to GPP.

Concerning the comparison of different tenders, computer-based cost-calculators were favoured by most of the workshop participants. The procurement officer would thereby be able to weight the importance of different procurement characteristics, such as economic performance, environmental performance, quality or reliability of delivery and a computer could then calculate the best tender. The US Government successfully uses cost-calculators for products such as building material including LCA analyses in the calculations. One example is the Building for Environmental and Economic Sustainability Programme (BEES) by the National Institute of Standards and Technology (NIST).

The workshop participants also agreed on the importance of training programmes, which should be associated with GPP. These programmes would not only concern procurement officers but also end-users. Procurement officers, stressed some of the workshop-participants, need clear rules (or computer programmes) for GPP tenders, as they are too time-constraint to check in depth available information. End users, on the other hand, should be trained in the appropriate use of new products so that they would not undermine the procurement policy. Some workshop participants gave examples of such training programmes e.g. training for lorry drivers in the UK or for cleaning staff in Austria.

3.2 Integrated assessment methods

Integrated assessment was thought to be another key element for an efficient GPP implementation. It refers to more cooperation between procurement officers and experts in environmental issues. Some participants have suggested the building of environmental expert panels, which would identify appropriate GPP policies for their agencies. One example is the UK’s gateway programme, which makes the approval of a project by an expert panel conditional for its further implementation. For smaller procurement processes, workshop participants suggested a regular steering group could identify “win-win”
policies. Some participants (ICLEI and US) have also stressed that the integration of senior managers in the GPP process is crucial to a successful GPP policy.

Steering groups or expert panels could provide the methodological framework for GPP policies, decide upon the assessment method to be used, and pass judgment on difficult assessment cases. In particular, workshop participants mentioned problematic cases such as: how to compare green and brown products which do not have exactly identical functional attributes, which is often the case? How to choose between two “green” products that have the same functional attributes but completely different environmental impacts? How to account for long-term effects such as savings due to longer life-times of greener products?

The complexity of these valuation questions often leads to the undue use of single environmental criteria, which might define “environmentally preferable” products in a wrong way (See Siemens 2001). One of the workshop participants gave an example of this from the UK, where weight was the criteria to choose the environmentally most preferable plastic bag, which excluded the heavier recycled bags from the market.

3.3 GPP as part of a policy mix

GPP often serves in areas where environmental regulation is absent or believed to be insufficient. The workshop participants felt that GPP is an instrument which is flexible enough to partly fill the gap of lacking regulations, at least in so far as the environmental performance of public authorities is concerned.

At the same time, regulations are an important framework for GPP. Austria for example presented one GPP policy which relies on input-output analysis of material flows (Oppenauer 2001). Incentives to apply the findings depend upon the existence of disposal costs which are set by regulation.

Some workshop participants stressed the danger of double internalisation: if environmental externalities of a product are already targeted by other policies, this has to be considered by GPP. For instance, if there was an ideal tax on CO2 emissions, GPP should not usually be used to explicitly favour the purchase of particular vehicles, above and beyond the incentives provided by the tax.

However, since some public authorities or agencies may have few incentives to reduce energy use or may be exempt from tax payments, GPP may even be required in such cases since the inappropriate procurement choice may be made. (See Johnstone et al. 2001) Similarly, if it was felt that there was a market failure associated with the commercialisation of particular green vehicles then such a policy may also be favoured even in the presence of the tax. In a more general way, workshop participants agreed that there was need for better policy-co-ordination between GPP and other environmental policies, in order to ensure a sensible “policy-mix”.

3.4 Assessment of GPP policies

A general assessment of the efficiency of GPP policies was difficult because of the lack of empirical data. However, “anecdotal” evidence of successful GPP policies could be given from many countries, such as Austria (Klausbruckner 2001 and Oppenauer 2001), Canada (Siemens 2001), the Czech Republic (Hájek and Sucharovová 2001), Denmark (ICLEI 2001), Finland (Nissinen 2001) and the US (Vallina 2001). The EU has announced a forthcoming study on the state of GPP in different EU-countries

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European Commission, represented by Paul Speight.
which intends to look at the actual practice of GPP (as opposed to the legal framework of GPP). ICLEI has also started a study, which will assess the environmental relief potential of different GPP policies (Plas 2001).

There was agreement among workshop participants about some more general features of GPP: GPP is geographically concentrated in some areas and nearly absent in others (such as the south of Europe for instance). GPP is organised in different ways in different areas. ICLEI gave some examples of countries where GPP is mandatory and others where it is voluntary, as well as countries where GPP is centralised (such as France) and others where local practices are widespread (such as Japan and Denmark). All these differences mean that reform proposals will have to be different in different areas.

The workshop called for more empirical data on procurement practices, and especially on green procurement. Indeed, ex post evaluation of GPP policies are scarce because the data is not sufficient. This has been confirmed in particular by the United States, not able to carry out some of the assessments of GPP that they scheduled. The workshop also stressed the need for more “in-built” mechanisms within agencies, which could make assessments easier and less costly.

4. Financial Incentives in GPP Policies

There are a variety of instruments which can be used to apply GPP policies. These can include information-based schemes targeted at procurement officers, the use of “shadow prices” for environmental impacts in the evaluation of alternative investments, the application of environment-related performance standards for the procurement of particular goods and services, and a number of other related measures. (See Marron 2001 for a typology and some examples. OECD 2000 provides a broader overview of policies and programmes in place.)

Eco-labels are perhaps the most prevalent tool, with many public authorities mandating or requesting that procurement-officers purchase labeled products wherever feasible. Workshop participants illustrated the efforts of different countries in this area (Hájek and Sucharovová 2001, ICLEI 2001), but also stressed the need for more mutual recognition. More generally, the workshop participants called for more translation of already available information in order to reduce implementation costs of GPP policies.

Those instruments which relate more specifically to financial incentives or appraisal methods were discussed in greater depth at the meeting.

Decrees and transferable credits

After information-based and training-based measures, decrees are the tool that is probably most often used in OECD countries. Workshop participants gave different examples for the use of decrees. In the US, for instance, there is a programme of “automatic substitutions” regarding recycled paper: the ministry has signed a contract with the central procurement agency in order to respond to every demand for virgin paper automatically by delivering recycled paper (Vallina 2001). Similarly, the UK has decided to buy 10% of governmental energy consumption from renewable energy sources.

Decrees are politically fixed goals of environmental policy. If mandated in a strict fashion across all operations they will not generally allow for efficient achievement of the objective (even within government operations). Moreover, they are not financial in nature. However, flexibility can be introduced in a way which brings about incentives for improved efficiency. For instance, through the use of tradable credits, allowance can be made to encourage environmental improvements in those areas where they are the most cost-efficient. GPP policy could consist in the issuing of tradable credits for a particular
procurement sector (such as energy-procurement). However, none of the countries has used tradable permits in the above context.

Price preferences and shadow prices

Price preferences are yet another tool to take environmental externalities into account in the procurement process. The US uses them as a short-term policy tool only (Vallina 2001). This restriction seemed to be seen as appropriate amongst most of the workshop participants. This is because short-term price preferences encourage the launching of new green products without excessively distorting the price system over the long term.

Shadow prices are more direct in so far as they internalise the environmental externality by its exact amount – i.e. they tax the bad directly. Conversely, price preferences are usually used as a means of support, and this can have perverse environmental effects (i.e. encouraging substitution, but also encouraging consumption overall). Moreover, in contrast to decrees, shadow pricing is more “blind”, encouraging procurement officers to choose whichever green products are relatively competitive and cost-saving. This is also why some workshop participants seemed to favour their use over the use of decrees which are usually more interventionist. However, in contrast to decrees, countries have very few experiences with shadow prices.

Third-party financing

Many GPP policies seek to overcome capital scarcity, which discourages green investments. The use of third-party financing is one possibility to overcome this scarcity. Energy Savings Performance Contracts, for instance, were considered to be a very promising tool by the workshop participants. In the US, ESPCs have led to substantial investments in new greener equipment (Vallina 2001). ESPC allow government agencies to invest in greener equipment without bearing the capital costs at the beginning of the investment, as investments are paid with the energy savings achieved. Maintenance costs are also low. In addition, the intervention of private specialists makes decisions about green equipment easier for the public agency.

However, ESPCs also have some shortcomings. They represent a long-term commitment (25 years) for the respective agency and thus future budgetary obligations. Also, in practice, ESPC turn out to be rather expensive, as 100% of all energy savings go to the contractor, and not, as theoretically possible, a decreasing share over time.

This last point has led the US government to think of new financial tools, which are derived from the ESPC: the Federal Energy Bank and ESCP for buildings (Vallina 2001). The Federal Energy Bank would replace the private investor and thus offer an ESCP contract to better conditions, without canceling the advantages of an investment exterior to the agency. ESPC for buildings would allow applying ESCP contracts not only for energy-saving equipment, but also for the whole construction of a building.

5. GPP and Budget Systems: Complementary Benefits from the Removal of Policy Failures

As noted in OECD (2000) budget and accounting systems can be barriers to environmentally preferable procurement. Removing policy failures in this area can lead to more environmentally friendly procurement, even without implementing explicit GPP policies. Analogously, GPP can help to identify institutional deficiencies and lead to both, lower procurement costs and higher environmental quality. Such situations are often qualified as “win-wins”. This paragraph describes some of them.
5.1 **Budget and accounting reforms can lead to greener procurement**

The workshop has identified budget, financial and accounting issues which can influence environmental characteristics of procurement. One of the background report mentions areas such as: foreshortened planning horizons; split departmental responsibility for capital and operating costs; inadequate managerial responsibility for operating costs; accounting systems and inadequate costing of future liabilities; the costing of physical assets; and, managerial flexibility in the choice of inputs and the retention of savings (See Johnstone et al 2001 and Siemens 2001).

The workshop participants have confirmed the importance of reforms in the above areas and stressed the need to emphasize the case for budget reforms. They established the following ‘check-list’ in order to identify areas of potential “win-win” reforms:

- Are the obstacles real?
- Are they environmentally significant?
- Is there realistic potential for reform?

Applying the above “check-list”, workshop participants identified promising and less promising areas for reform. Presentations from the US and Austria have illustrated the importance of giving managers some ability to retain savings from efficiency improvements as key. In the Vienna Hospital association, for example, they where an important factor in the successful implementation of a range of reforms, such as waste and cloth reduction or energy-and water-savings (Klausbruckner 2001).

In addition, workshop participants felt that asset registrars provide policy-makers with the necessary information to make sensible decisions related to the need for and the nature of new investments, particularly with respect to property and some capital equipment. To the extent that asset registrars provide information necessary to evaluate the need for new greenfield investments they can have beneficial effects on the environment.

Moreover, a high potential for reform was identified in the following areas: split departmental responsibility for operating and capital costs, inadequate managerial responsibility for operating costs and inadequate flexibility in the choice of inputs (See Johnstone et al. 2001). Together these measures would give managers the means (and incentives) to increase the efficiency of their procurement.

A change in the budgeting span on the other hand was thought to have a low potential for reform. Likewise, framework agreements, which concern bulk-purchasing of sub-central government units of different agencies, were found to be problematic tools, although countries’ experiences with such agreements were mixed.

In any event, while reforms of the sort discussed above are likely to have positive environmental consequences (particularly with respect to issues such as reduced energy use and waste disposal), it is important to recognise that this may not always be the case (See Johnstone et al 2001).

5.2 **GPP can lead to more cost-efficient procurement**

Whereas the above section has pointed out potential for budget reforms which could induce environmentally preferable procurement, this section focuses on cases where GPP policy leads to general efficiency improvements in the procurement process.
It was pointed out by many workshop-participants that GPP policies can result in financial savings. This can be relatively direct such as through energy-and-water-savings or reduced waste disposal costs (Klausbrukner 2001 and Oppenheimer 2001). However, what was left unanswered by the workshop participants was why such unexploited opportunities for cost savings existed even when environmental characteristics are ignored. Indeed, one country report (Hajek and Sucharovova 2001) pointed out that in their experience in strict terms, financial issues were not a barrier to greener purchasing except for one particular type of product.

Many empirical examples from workshop participants illustrated the cost-saving potential arising from the implementation of GPP policies. The US, for instance, has implemented the so-called “pharmacies programme” where the will for reduction of pharmaceutical waste led to the restructuring of the pharmacy management: non-used pharmacies could be returned to pharmacy-centres. This programme reduced the chemical waste by 60% within a period of three years. Another example is the US “Capital Programming Policies” which stopped, by virtue of the implementation of GPP policies, the inefficient use of governmental funds in certain building contracts (Vallina 2001).

In addition, the Vienna Hospital System presented a project which induced a whole range of efficiency improvements via the implementation of GPP policies (Klausbruckner 2001). Cost savings in this project were due to different factors: First, GPP policies were associated with training programmes, which lead to a more rational use of procurements. This concerned cleaning products and also water- and energy use. Second, avoiding waste reduced explicit or implicit disposal costs. And finally, additional effects such as improved health are supposed to result from GPP policies (e.g. the procurement of PVC-free products) and these health improvements will trigger substantial cost savings in the future.

It would seem, therefore, that at least some GPP policies have resulted in cost savings which should have been identified even in the absence of stated objectives to improve the environmental performance of procurement. This points to the importance of broader issues of public management and efficient procurement.

6. Conclusion

Greener public procurement does have the potential for being an effective and efficient environmental policy tool if it is used as a complement to other policies, and if the right types of goods and services are targeted. In particular, the benefits are likely to be greatest if the share of government procurement in the targeted sector is big, and/or if the public procurement helps in launching innovative products.

Many GPP policies are dependent upon the provision of information and training. These are key to their success. However, more efficient implementation of GPP should include the application of advanced policy instruments such as shadow prices and tradable credits, which are not yet commonly used. The application of new financial tools such as third party financing, for instance, is largely due to the establishment of GPP policies.
There are win-win situations associated with the greening of governmental procurement. On the one hand, financial, budget and accounting reforms can lead to a better consideration of environmental characteristics in public procurement. On the other hand, greener procurement can lead to efficiency improvements in management and budgeting systems, resulting in improved allocation of public finances. Thus, there are synergies between the environmental performance of public authorities and good public management generally.

In order to be able to improve GPP policies, sound assessment methods are necessary. This starts with the collection of data and in-built mechanisms in order to improve assessments within agencies. Future measures could include the development of objective indicators of the environmental characteristics of public procurement.
EXECUTIVE SUMMARIES OF BACKGROUND REPORTS

Report 1: Greener Public Purchasing as an Environmental Policy Instrument (Donald Marron)

This background report develops a framework with which to evaluate the strengths and weaknesses of greener public purchasing (GPP) as an instrument of environmental policy. This framework recognises three potential justifications for GPP initiatives: (a) structural inefficiencies in government purchasing, (b) inadequate environmental regulations, and (c) insufficient public and private support for innovation.

Structural inefficiencies in government purchasing, e.g., conflicts between capital and operating budgets, may result in purchasing decisions that are bad from both an economic and environmental perspective; a typical example would be the purchase of a standard piece of energy-using equipment when a more efficient piece would have lower overall costs. GPP reforms that correct such institutional deficiencies can potentially be “win-win”, in the sense that they generate both reductions in government costs and improvements in environmental quality.

Other GPP policies, e.g., price preferences and set-asides for green products, may be “win-lose”, in that they pursue environmental improvements even if they increase government costs. Such policies are presumably justified by the belief that existing environmental regulations are inadequate or, at least, that they do not do enough to promote environmental innovation. Such policies require closer scrutiny to ensure that increased costs are justified by the resulting environmental benefits.

Several factors play important roles in evaluating such policies. First is the magnitude of government purchasing. The government sector accounts for an average of approximately 20 percent of GDP in OECD member countries. Less compensation for employees (which is not relevant for this study) the figure is just under 10%. Advocates often cite these figures as evidence that GPP has significant potential as an environmental policy instrument. However, these figures aggregate the purchasing decisions of many distinct central and sub-central government entities. Individual GPP initiatives thus have much narrower scope than these figures would suggest. Moreover, government purchasing is concentrated in certain industries, such as defence and highway construction. As a result, individual governments typically account for very low shares (2 percent or less) of purchases in most sectors. In these sectors, GPP policies will have significant impacts only if individual governments coordinate their actions or private consumers and producers react in ways that reinforce the GPP policy.

Thus, a second factor is the private sector response to GPP. Private purchasing may become greener if the government policy reduces the costs of purchasing green products (e.g., economies of scale or induced innovation) or increases market acceptance of green products (e.g., through demonstration effects). Conversely, private purchasing may become browner if the government policy results in higher prices for green products or lower prices for brown products (i.e., crowding out through standard supply and demand responses). The likelihood and magnitude of these reinforcing and counteracting effects depends on specific features of the product markets.
This economic analysis implies that GPP has specific strengths and weaknesses as an instrument of environmental policy. GPP is most promising, relative to other environmental instruments, when government is the primary source of demand. In these cases, well-designed GPP initiatives can be near-perfect substitutes for other environmental instruments. In markets with significant private demand, GPP appears to be most promising when it focuses on developing and commercialising innovative green products for which there is a latent private demand. In other words, GPP will be most effective when it focuses on bringing forth new green products that the private sector has reason to adopt.

Conversely, GPP will be least promising when it focuses merely on switching government purchases from existing brown products to existing green products. Such switching will generate relatively minor environmental gains, given the relatively small purchasing power of most government entities and the potentially offsetting response of private purchases. Offsetting behaviour is particularly likely with products whose environmental characteristics are invisible or irrelevant to private purchasers. Most notable among these are products that differ only in the greenness of their production, but not in their quality for the buyer.

These observations suggest that the potential environmental benefits of GPP may be small in many markets, relative to other environmental policy instruments that can target 100 percent of these markets. This does not imply that GPP is undesirable. Other policy instruments may be unavailable or may be more effective when combined with GPP initiatives. Moreover, GPP initiatives may generate the sorts of information and experience that should be collected before broader regulatory efforts.

Report 2: A Review and Critical Evaluation of Selected GPP Policies and Programmes (Renetta Siemens)

In response to increasing GPP efforts across OECD Member countries, a review of a small number of selected GPP programmes and policies was conducted to assess their overall effects, particularly related to four key evaluation criteria: environmental effectiveness, cost effectiveness, dynamic incentives and soft effects.

In designing and implementing GPP programmes or policies, OECD Member countries face many options. First, there is the choice amongst a number of different GPP instruments, including: information-based tools, training and communications tools, accounting and financial tools, price preferences and public procurement directives. Decisions are also required as to whether implementation efforts are centralised or decentralised. Finally, one of the most challenging issues is how to define and select “greener” (less environmentally damaging) products both in terms of the number (single vs. multiple) and type (technology vs. performance based) of applied environmental criteria. Typically, GPP design and implementation decisions are made based on stated objectives, political and legislative considerations, as well as on anticipated barriers, such as decentralised public procurement, lack of senior management commitment or resources, and organisational cultural barriers.

Six GPP programmes and policies in five countries (Austria, Canada, Denmark, the U.K. and the U.S.) were selected for the purposes of this review. The GPP programmes and policies were selected based on the availability of evaluations or other data, as well as on their comparative difference in design (mandatory vs. voluntary), scope (national, provincial, local), products (cleaning supplies, recycled paper, green power, energy efficient equipment, organic food) and applied instruments (guidelines, third-party financing, assessed value-for-money) to reflect the variety of GPP approaches undertaken by OECD Member countries.
Although the four key evaluation criteria were applied to assess the overall effectiveness of the selected GPP programmes and policies, the general absence of evaluations and data limited the extent to which conclusions could be made. First, conclusions relating to environmental effectiveness are mixed. Many of the selected GPP programmes and polices were successful in achieving stated targets or in realising positive environmental impacts. However, because of an undue emphasis on a single or narrow set of environmental criteria (that can inadvertently result in negative environmental impacts), conclusions as to their overall environmental effectiveness were not possible. GPP efforts that emphasised multiple criteria and products were typically unable to demonstrate environmental effectiveness due to an absence of data.

Conclusions with respect to cost effectiveness are also variable depending on the type of GPP programme and targeted product category. Many of the selected GPP policies and programmes involving energy, asserted cost savings or some other broadly defined economic benefit, though actual amounts were often not quantified. Those GPP efforts that applied more progressive accounting and financial practices, such as life cycle costing (LCC) and value for money (VFM), also demonstrated cost-effective results. However, for those programmes and policies that resulted in increased government outlays to pay for premium-priced products, it was not possible to draw conclusions on their overall cost effectiveness.

Dynamic incentives of the selected GPP policies and programmes appeared to be either very positive or not significant. Very targeted programmes were able to create strong dynamic incentives, not only for the invention and commercialisation of greener products, but also for their diffusion in the broader marketplace. Other GPP efforts, typically those involving a broad range of product categories and hence suppliers, were generally unable to demonstrate any dynamic incentives. Important soft effects, such as leadership and credibility, more efficient public procurement practices, improvements to organizational culture and greater personal responsibility for the environment, were often realised by the various GPP programmes and policies.

A management assessment indicated that, in general, the success of GPP programmes and policies can be attributed to various "best practices". These include, for example, obtaining senior management support, enacting mandatory GPP requirements, employing a strategic approach to product selection, developing concrete tools, fostering learning and collaborating with the private sector.

At the same time, however, some serious weaknesses were also revealed. Of greatest concern was the lack of GPP targets and indicators to measure progress, coupled with a general absence of programme evaluations. The absence of GPP targets and indicators point to both the difficulty in defining and gathering GPP data, as well as a general lack of priority to these matters. As these programmes and policies mature, a continued failure to quantify success, particularly related to environmental and cost savings goals, could very well jeopardise the future credibility of GPP as a substantive policy instrument. Another common failing was an undue reliance on a single or narrow set of environmental criteria. Despite constraints with respect to the science and methodology of life cycle assessment (LCA), GPP programmes and policies need to make greater strides in refining and applying LCA to a wider range of product categories.

Many of the selected programmes and policies were successful in strategically applying GPP as an environmental policy instrument embedded within a more comprehensive political agenda. These successes point to the untapped potential of GPP and suggest that greater linkages between GPP and other policies should be fostered to enhance success in achieving complementary goals.
This paper provides background information for a workshop on Greener Public Purchasing by looking at budget and accounting practices and considering whether they are a barrier to public procurement in general, and greener public purchasing specifically.

Government procurement of goods and services makes up a significant share of national GDP. OECD governments account for almost 20 percent of total procurement in their countries (9% when compensation for employees is excluded.) Non-OECD governments account for nearly 14.5%. National government procurement is significant in some key sectors (such as those related to defence) and much smaller in other sectors. Two-thirds or more of government procurement is carried out at the sub-national level.

In many countries, well-established procurement processes, from soliciting tenders to awarding contracts, are designed to be open, fair, and transparent in order to spur competition and lower prices. When evaluating tenders, governments may choose to emphasise lowest price, or take whole life cost and quality into consideration by emphasising value for money. Some countries also seek to advance public policy goals (industrial, social and environmental) through procurement policies. Trends in procurement include greater competition between official procurement agencies and the private sector, privatisation of some government procurement agencies, increased reliance on electronic commerce, and more small purchases being made directly by government consumers and through use of government purchase cards.

The paper reviews a number of budget practices that have a bearing on procurement, including trends toward medium-term budgeting, decentralised decision-making and emphasis on performance, flexible uses of annual funding (such as being able to carry forward funding or to keep savings), the move in some governments toward accrual budgeting and accounting, separation of capital and current expenses in budget analysis, uses of capital charges, different forms of investment appraisal, and discount rate policy.

The paper concludes that budget and accounting conventions have not been insurmountable barriers to efficient procurement. Some practices (such as rigid adherence to a one-year time frame for spending, or budget ceilings that favour new construction projects over maintenance of existing infrastructure) have at times distorted decision-making about the optimal use of resources. Most budget and other financial reforms being undertaken by OECD member countries may facilitate public procurement; a few may make it more difficult. Some countries would do well to strengthen basic financial management practices before instituting widespread reforms. Greater use of existing practices (life cycle costing, medium-to-long term budget timeframes) to look at the long-term effects of budget choices and procurement decisions may help in the procurement of environmentally friendly goods and services, particularly those goods that have high up front costs but generate savings over the longer term. Changes can also be made to enhance the procurement official’s ability to foster green procurement without requiring changes in budget or accounting conventions.

This background paper explores the effects of financial appraisal techniques, budget systems and accounting practices on the environmental characteristics of goods and services procured by public authorities. It is concerned with public procurement generally, and not just the effects of these practices on "greener public purchasing" programmes and policies. It is argued that there are significant “win wins” associated with the application of improved financial appraisal techniques, budget systems and accounting
practices. Scarce public resources can be used more efficiently, at the same time as improving environmental performance.

The report provides an overview of some of the types of "cost structures" which characterise environmentally preferable goods and services likely to be purchased by public authorities. In three cases (HVAC systems, pest management, and office flooring), "green" and "brown" alternatives are compared in terms of their lifecycle costs. These examples are primarily illustrative, but they serve to highlight the importance of the issues discussed in subsequent sections. These issues are further explored in the Annex.

The report then reviews some of the main budgetary, financial and accounting issues which are likely to affect the environmental characteristics of procurement, drawing upon Richard (2001) and linking them with the discussion in the previous Section. The specific effects of the following issues are explored:

- Foreshortened planning horizons;
- Split departmental responsibility for capital and operating costs;
- Inadequate managerial responsibility for operating costs;
- Accounting systems and future liabilities;
- The costing of physical assets; and,
- Flexibility in the choice of inputs and retention of savings.

All of these can affect the environmental characteristics of goods and services purchased, and in many cases there are joint finance and environmental benefits from improved practices.

Following from this, the report discusses some of the budgetary, financial and accounting issues which arise with the explicit internalisation of environmental externalities in public procurement. While the application of appropriate environmental policies to all actors in the economy (public authorities, private firms and households) would be ideal, there are some specific issues related to public procurement which remain relevant even if this is not the case: the use of shadow prices to reflect environmental damages; the nature of the liability regime and its effects on public authorities; and, the choice of discount rate for environmental goods in public investment appraisal decisions.

The need for policy coherence and coordination is stressed, allowing for the exploitation of "win wins" of the sort described above. In addition, however, in cases where wholesale budget reform is not feasible some more limited measures are suggested which obviate the environmental effects of some policy failures associated with financial appraisal techniques, budget systems and accounting practices.
REFERENCES

Background Reports Prepared for the Workshop


Workshop Presentations

HAJEK, MIROSLAV AND DAGMAR SUCHAROVOVA (Department of Economic Policy, Ministry of the Environment, Czech Republic) “Progress and Encouraging Greener Public Purchasing in the Czech Republic”, 2001.

KLAUSBRUCKNER, BRUNO (Environmental Manager, Vienna Hospitals Association, Austria) Project “Eco Purchase Vienna”: Main Objectives and Important Projects”, 2001.

NISSINEN, ARI (Researcher, Finnish Environment Institute, Helsinki, Finland) “Greener Public Purchasing in Finland”, 2001.

OPPENAUER, HEINRICH (Engineer, Department of Environmental Protection (Waste Management), Vienna City Administration, Austria) “Input-Output Analysis of Material Flows for Priority GPP Initiatives”, 2001.


Other Background Literature


