

Building Sustainability into Your Supply Chain Through e-Procurement



Sustainability has become a critical component in corporate and government sourcing strategies. This is because one of the first steps to be taken towards becoming a sustainable business is changing both the processes by which the organisation purchases through its supply chain, as well as the types of environmentally friendly products and services it buys. But sustainability is more than reducing the impact on the environment. It's also about taking steps to maximise longevity in the market, recognising that higher energy costs and taxes, as well as stricter government legislation, will raise the cost of operations in the long term. Driven by changing client expectations, pressure from investors and shareholders, and increasing regulation, organisations around the globe are now looking at ways to integrate sustainable purchasing processes standards into their sourcing strategy. **Over 50% of an average organisation's carbon emissions are typically from the supply chain, rather than from within its own four walls¹.**

If you're a procurement executive or director, chances are you're either thinking about how to implement a sustainable procurement programme, or you're already in the process of doing so and are becoming well versed in the litany of challenges.

So, how does e-procurement come into play? The business benefits of e-procurement, such as controlled spend, reduced requisition to order costs and cycle time, and a reduction in the percentage of maverick spend, are known, proven and understood. Environmental considerations may not be the primary driver behind implementing e-procurement but, by utilising e-procurement best practices, you can reduce the challenges typically faced when deploying and administering a sustainable procurement initiative.

This white paper will call out **nine e-procurement best practices** and demonstrate how they will help you reduce environmental waste and implement and manage your sustainable purchasing programme. Even if you don't have an e-procurement system in place yet, we'll highlight steps you can take to leverage the same best practices to benefit your sustainable procurement initiative. Finally, we will review a list of factors to consider when selecting preferred suppliers to capitalise on the **benefits of e-procurement**, as they pertain to your sustainable procurement initiatives.

But first, let's define what e-procurement and sustainable procurement are, and how they complement each other?

- **e-Procurement** is the business-to-business purchasing and sale of supplies and services via your supply chain, using the Internet². A properly implemented e-procurement system connects to a company's internal systems, such as accounts payable, as well as directly to their vendors and suppliers, allowing system-to-system integration and automation of much of the purchasing process. An e-procurement process is by nature already a more sustainable way of procuring services and products, because it's automated, efficient and paperless. But a proper e-procurement system also allows organisations to take sustainability a step further by enabling the selection of products and services according to set international sustainability criteria.
- **Sustainable procurement** is, therefore, the sourcing of products and services that have less impact on the environment than their traditional counterparts³. In addition to reducing a company's carbon footprint and environmental waste, sustainable procurement is seen as also having multiple long-term business benefits. These include an improved public image, competitive advantage via innovation, and potential economic benefits through improved efficiencies, longer lasting materials, and less expense on waste disposal and clean-up.

¹ Carbon Disclosure Project, Supply Chain Report 2011

² SearchCIO.com

³ Wikipedia.com

Key challenges of implementing a sustainable procurement programme:

- **Cost** – Although many studies now show the long-term cost savings of buying 'sustainably', there are often higher upfront costs for switching to these environmentally friendly products.
- **Availability** – Local distributors may not stock sustainable products, or only stock in small quantities.
- **Internal education and regulation** – Mid-to-large-size organisations will face the challenge of training every employee that makes purchasing decisions and ensure the newly preferred, sustainable products are being purchased.
- **Supplier evaluation** – It's not always obvious whether a particular supplier meets the sustainability standards set by the purchasing organisation, and evaluation methods in the form of sustainability e-questionnaires may be necessary.
- **Product information** – Obtaining up-to-date product details, including environmental specifications, from suppliers can also be difficult.
- **Time to implementation** – Large organisational changes don't happen overnight. It takes time to research, negotiate and implement a successful sustainable procurement programme.

While the implementation of a sustainable procurement programme can be challenging, there are many ways in which utilising e-procurement will help you overcome these challenges and offer immediate and tangible benefits.

This white paper will call out nine e-procurement best practices and demonstrate how they will help you reduce environmental waste and implement and manage your sustainable purchasing programme.

How does e-procurement help overcome the challenges of sustainable procurement?

Sustainable procurement programme enabler	e-Procurement best practice
<ol style="list-style-type: none"> 1. Knowledge transfer and training 2. Selection and control of suppliers (enforce sustainable suppliers) 3. Measurement and compliance 4. Paperless workflow 	<ol style="list-style-type: none"> 1. Centralised procurement governance 2. Automated processes/workflow 3. Integration with contract compliance and finance 4. Invoice integration 5. Online credit card transactions (p-cards) 6. Enabled supplier relationship 7. Conducting spend data analysis 8. Increasing visibility through reporting tools 9. Custom vendor e-catalogues

Each of the nine e-procurement best practices listed in the table above supports at least one of the four sustainable procurement enablers.

Centralised procurement governance

Centralised procurement governance is critical to the success and deployment of your sustainable procurement initiative. e-Procurement can help by providing a central hub for disseminating information, enforcing preferred supplier and product purchases, and maintaining visibility and control over the whole supply chain.

e-Procurement has long been touted as the key lever for keeping spend under control and, for all of the same reasons, can also be a great resource for managing sustainable purchasing. A centralised procurement operation should be able to utilise its e-procurement system to implement sustainable purchasing policy across the entire organisation. By incorporating negotiated price lists from preferred suppliers and/or approved sustainable products and utilising automated workflow approval, your e-procurement system will help you educate and enforce sustainable procurement policy to all business units quickly and efficiently.

Automated processes/workflow

As we've highlighted before, one of the biggest challenges an organisation will face when implementing sustainable procurement is training every employee involved in the procurement process to ensure that the newly preferred, sustainable products are being purchased. There are typically two key groups involved in the procurement process, the internal consumers (department(s) requesting the purchase), and the procurement staff – together these two groups make up a large employee base involved in the purchasing process.

By capitalising on automated workflow approval process capabilities available in most e-procurement systems, you're able to better manage and monitor a sustainable procurement policy. You can set up parameters for management to be notified and/or approval to be required when 'non-sustainable' or non-preferred products are being requisitioned. This will reduce incidences of rogue purchasing and ensure that when difficult buying decisions must be made, the sustainable procurement champions on staff are able to weigh in.

Of course, process automation also leads to a reduction in manual processes and paper consumption. This topic is covered in-depth in the next two sections.

Integration with contract compliance and finance, invoice integration and online credit card transactions

By integrating your e-procurement system with back-office functions, such as compliance and finance, and the corresponding systems such as ERP and CRM systems, you can initiate a paperless internal workflow. This will not only reduce a lot of manual effort, but save greatly on the amount of paper forms and printed documents circulated in your office.

Another contributor to paper savings is invoice integration. If your supplier is able to integrate its invoice system with your e-procurement system, then invoices should automatically be generated from purchase orders, which in turn should be generated from the quote. This will ultimately result in less potential for error and less paperwork. Once you receive the invoice, you're able to conduct a three-way match of the quote, purchase order and invoice electronically, via your e-procurement system.

A third contributor to paper savings is online credit card transactions, or the use of P-cards. The remittance of payment electronically via a credit card not only speeds up the purchasing process, but alleviates the need for invoices to be created or cheques to be cut.

If you've implemented even one of these three best practices and you're not tracking the paper and energy savings, then you're missing out on an easy and immediate way to demonstrate procurement's contribution to your corporate sustainability efforts. Tracking the paper and energy savings is a very straightforward process, and one you can begin today.

Take inventory of the steps in the purchasing process that utilised printed or faxed paper prior to implementing your e-procurement system. Be sure to include the average number of pages each step included (e.g. do your invoices average 2-3 pages?), and then look at the total volume of purchases now performed by your e-procurement system.

Armed with this information, you can do some simple calculations in a spreadsheet to determine the amount of paper you have saved in a given month or year. You can even take that a step further and equate the energy savings (and subsequent carbon emission reduction) that comes from reduced paper production and reduced printer and fax machine usage.

Consider this, the production of one ream of paper (500 sheets) equates to 6% of a tree, 27.8 kWh of energy, 6.4 kg (14 lbs.) of greenhouse gas, 180 litres (47.6 gallons) of water waste, and 2.6 kg (5.7 lbs.) of solid waste. To print or fax that same ream of paper would be an additional 10 kWh of electricity and 5 kg of carbon emissions. That may not seem like a lot, but once you multiply these figures with the amount of paper you are saving with e-procurement, the impact could really add up over a year.

Once you've calculated the environmental impact of reducing the paper trail, you need to share this information with your executive leadership. This is easy to track and measure, especially once you've got your base formula down, and should be done on at least a quarterly basis. What's more, if you've been struggling to get full adoption and usage of your e-procurement system across all your business units, this will help make a strong case for getting these areas to move forward quickly. As more areas of your business migrate all their purchasing to a paperless method, you can watch your impact on environmental sustainability grow.

Enabled supplier relationship

According to the Aberdeen Group⁴, an enabled supplier relationship includes one or all of the following elements:

- Business documents and communications are exchanged in an automated fashion.
- If a catalogue is available, the content is easily managed online.
- Supplier information is actively managed through an automated or self-service process (including collection, verification, cleansing, and updating)

⁴Aberdeen Group: eProcurement Trials and Triumphs, October 2007

Exchanging documents and communications electronically and in an automated fashion across the supply chain confers a tangible paper and energy savings. Even with something as simple as electronic quotes and purchase orders you can drive significant savings in your paper usage and energy consumption.

For example, **if the average quote you receive is three pages long and the subsequent purchase order averages two pages and you do just 30 transactions a month, you have saved a minimum of 1,800 sheets of paper annually.** Once you factor in the number of different quotes you receive before creating a purchase order and the number of times that quote and/or purchase order is printed out, and/or faxed back and forth for signatures and approval, you can actually estimate savings closer to **6,730 sheets of paper a year.**

By working with vendors who offer online catalogues you're not only able to access more up-to-date pricing information, but you may also be able to access product specifications such as energy consumption, environmental agency certifications, chemical compounds, etc. By structuring your sustainable purchasing guidelines around these criteria, you can make informed buying decisions that fall in line with your sustainable procurement policy.

Another part of your sustainable procurement policy should be vendor selection criteria. If you're able to actively manage supplier information via an automated or self-service process, you have the means to review up-to-date credentials and information such as government and agency certifications, carbon disclosure, and corporate environmental policies.

Conducting spend data analysis and increasing visibility through reporting tools

By implementing an electronic purchasing process in your organisation, you've no doubt already gained greater insight into spend data, owing to a variety of reports that can be run from the e-procurement (or even ERP) system. By utilising historical purchasing data, you're better armed for productive vendor negotiations. This will help your sustainable procurement initiative in two ways.

The first is with price negotiations. One of the challenges of sustainable procurement is that environmentally friendly products often cost more. Although there's a greater likelihood of realising long-term cost benefits, buying these products still results in a significant impact on the corporate wallet today – which is especially challenging in a period of economic decline. Effective price negotiations are more important than ever when it comes to sustainable products. Being able to show past purchasing patterns with a particular vendor and/or predict future purchasing patterns can really help your negotiation.

Here's a very simple example. Let's say you're a manufacturer of construction and farming equipment. All your machines require a special coating material to help the paint resist wear and damage from the elements. You've just discovered a new vendor that produces specialty coating that has less toxic chemicals and is therefore better for the environment. By extracting the historical purchasing data on how much coating material your company purchases each month, you're able to show the new vendor solid evidence of the amount of business you plan to do with them and therefore utilise this in negotiating better, bulk rates.

The second way in which historical purchasing data can help with vendor negotiations is through volume predictability. By telling the vendor upfront how much product you predict you will need to purchase, you can make sure they're able to meet your needs. As stated before, availability is a key challenge in sustainable procurement implementation. Biodegradable, recycled or other sustainable products are often new and haven't had the same level of adoption, so suppliers may produce these products in smaller quantities to 'field test' the demand. Find out upfront if the vendor you're talking to can commit to being able to provide you with the volume you need.

These are things you're probably already doing if you have an e-procurement system in place, but now you can apply these practices to your sustainable procurement efforts.

Custom vendor e-catalogues

Custom catalogues or pricelists are a standard best practice implemented with most e-procurement systems, and a fantastic tool for enabling sustainable purchasing policy. If you already have certain products or vendors identified as meeting your sustainability criteria, then you should be utilising your e-procurement system to create purchasing templates with these preferred products.

The challenge remains that not all suppliers may be able to support custom catalogues or price lists, even if your e-procurement system can. When making decisions about preferred vendor partners, it's important that questions about their capabilities to integrate their catalogues with your purchasing system are raised and used as an evaluator. (See the last section of this paper, which discusses what you should look out for when selecting vendors.)

By leveraging custom e-catalogues in conjunction with an automated workflow approval process, you're able to put controls in place that will help ensure your organisation is indeed purchasing the preferred sustainable products. These may include products with official sustainability certifications, such as Energy Star or Blue Angel ratings.

My organisation doesn't have an e-procurement system in place; can I still tap into the benefits of e-procurement to roll out my sustainable procurement initiative?

The great news is that even if you don't have an e-procurement system in place, or you have one that is not fully implemented across your organisation, you can still leverage the best practices and subsequent benefits listed above. There are two ways this can be done:

- By working exclusively with vendors who offer their own client-facing purchasing portals, or
- By working with a third-party service provider that utilises an automated procurement process with a network of vendors and suppliers

If you typically buy from small manufacturers, you may have to go with the latter option, as smaller organisations are not likely to offer clients an online purchasing portal. However, an emerging group of large companies – often third-party suppliers or VARs – offer the benefits of e-procurement via their own custom-built tools or web portals. These are typically known as 'hosted procurement solutions' and allow you to take advantage of the same e-procurement system best practices discussed above, without building or installing your own.

There are a few challenges with this route. The first, and most obvious, is the availability of vendors that offer a hosted procurement solution. Even if a supplier touts their ability to provide this service, it may not be everything you need to help manage your sustainable purchasing initiative. For instance, they may only offer online purchasing of select products, or only offer standard pricing instead of custom contracted price lists.

The second challenge is internal education and implementation. If you have an e-procurement system in place, you're able to reach all areas of purchasing instantaneously (assuming they all use the same system) when putting a new policy in place. If you rely on a hosted procurement solution, you have to invest greater effort in educating your staff on the chosen vendors and how to use their procurement portal.

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How to choose the right vendors

First and foremost, check what the **supplier's own sustainability policies and procedures** are, and if there are any documentation and/or certifications to support these, such as ISO14001 certification, or membership of the Carbon Disclosure Project's Supply Chain Programme. Then, select vendors that can either integrate their electronic catalogues with your existing e-procurement system or offer a hosted procurement solution. If you want to integrate, check if the vendor has successfully done so in the past. Also ask for case studies, client referrals, and what type of support they offer for order management.

Second, be sure to ask your vendors if they **support a custom price list or catalogue**. If you already have an e-procurement system and wish to utilise punch-out, ask the vendor how custom catalogues are created. If you need the vendor to provide a hosted procurement solution, ask if their solution offers this functionality, and again, don't be afraid to ask for specific details. Request a demonstration, and talk to clients who are already using the system.

Third, if you're working with VARs or third-party suppliers, be sure to ask if their **pricing catalogues and/or hosted procurement solution are integrated with the original equipment manufacturer's (OEM) catalogues**. This will indicate how up-to-date the pricing information and product availability are. If not integrated, you may run into problems with having to redo quotes or purchase orders due to old or expired data. Also find out if the vendor's solution offers automated workflow approval.

Last, but not least, ask about reporting and data transparency. If you already have an e-procurement system, you should be able to **set up all the reports** necessary to provide the right level of insight. However, it's important to make sure you have a detailed list of the types of data and information you're trying to capture and that the vendor can push that information to your procurement system or ERP.

Dimension Data's e-procurement offer

Dimension Data is uniquely equipped to help global organisations address IT equipment procurement and logistics issues by providing efficiency, control, risk mitigation, and visibility, all supported via our global footprint and expertise.

To help our clients maintain the high level of visibility and control needed to manage the procurement of IT products and services on a global basis while still driving economies of scale, we developed a global e-procurement system called **Dimension Data Direct**.

Dimension Data Direct allows clients to transact with us electronically via either punch-out from their existing e-procurement system, or by utilising our hosted procurement solution.

Dimension Data Direct supports all the e-procurement best practice tools and offerings mentioned in this white paper, including preconfigured catalogues, custom price lists, automated workflow approval, and on-the-fly reporting. As a supplier of leading IT products and services from OEMs such as Cisco and Microsoft, our e-procurement solution provides real-time pricing and product configuration information and has processed more than USD 2.5 billion in orders in FY 2010.

One of the solution's most compelling features is the ability to automate the selection and procurement of certified sustainable products, including those with qualifications that indicate compliance with:

- The Restrictions of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)
- The EPEAT green electronics registry
- Energy Star
- Blue Angel

In addition to these advantages, Dimension Data Direct eliminated the need to print 4.7 million sheets of paper in FY 2008 alone, which in turn saved 574 trees, eliminated 180,940 kg of carbon emissions, prevented over 2 million litres of water from going to waste and more than 24,000 kg of solid waste from being created.

For more information about our e-procurement system visit the **Dimension Data Direct microsite** or contact the Dimension Data Direct representative in your region:

Australia

User and technical support: 1800 DiData (1800 343282)

Contact e-mail: auddirectsupport@dimensiondata.com

Americas

User and technical support: 1 800 480 3330

Outside US: + 1 508 424 3378

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Asia

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Europe

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Middle East and Africa

User and technical support:

Contact e-mail: Direct.Support@dimensiondata.com

Dimension Data Direct is part of Dimension Data's Sustainable Solutions – [click here](#) to find out more



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