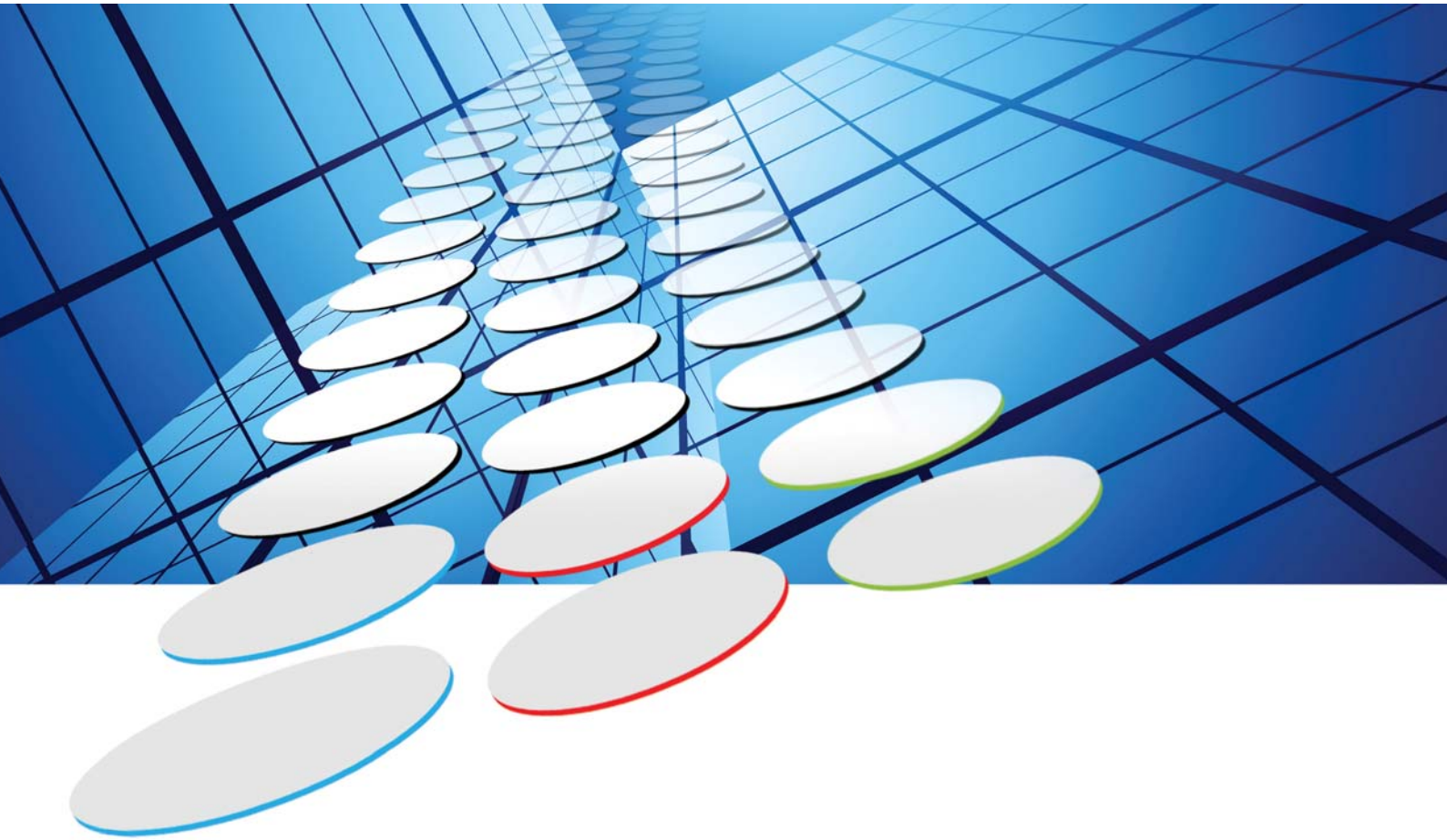


What are the environmental burdens of
invoicing systems?

A Comparative Life Cycle Assessment (LCA)



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Converga's Life Cycle Assessment (LCA) shows that for every 1 million invoices, up to 800 tonnes of CO2 and 3200 trees can be saved if the invoices are processed digitally.

Converga's Life Cycle Assessment (LCA) on the environmental burden of invoicing systems was completed in November 2008 in conjunction with **Hatch** consultants. The goal of the assessment was to determine exactly how much of a positive effect on the environment an organisation can make by transitioning their invoicing systems from in-house to outsourced and from paper to digital. By the end of the assessment we were able to conclude that energy and Greenhouse Gas (GHG) burdens of outsourced and digital systems are significantly lower than conventional in-house paper-based invoicing systems. The assessment endorses Converga's Paperless Accounts Payable (PAP) solution as an environmentally friendly option; it avoids paper consumption, physical delivery and the handling of invoices. Let's look at the assessment in more detail.

What exactly is a Life Cycle Assessment?

It is one of the key methods used increasingly by industry professionals for analysis of the environmental impacts of products and services. A Life Cycle Assessment (LCA) is a tool of industry ecology which systematically quantifies environmental aspects such as energy consumption, material consumption, and greenhouse gas emissions. In this assessment an invoice is tracked from creation to destruction.

Purpose of this assessment

This assessment was undertaken to determine the environmental burdens of *in-house paper invoicing*, *outsourced paper invoicing* and *outsourced digital invoicing*. Firstly we wanted to identify which system has a lower environmental impact and secondly, to explore opportunities to create more sustainable invoicing systems.

Digital times mean digital solutions

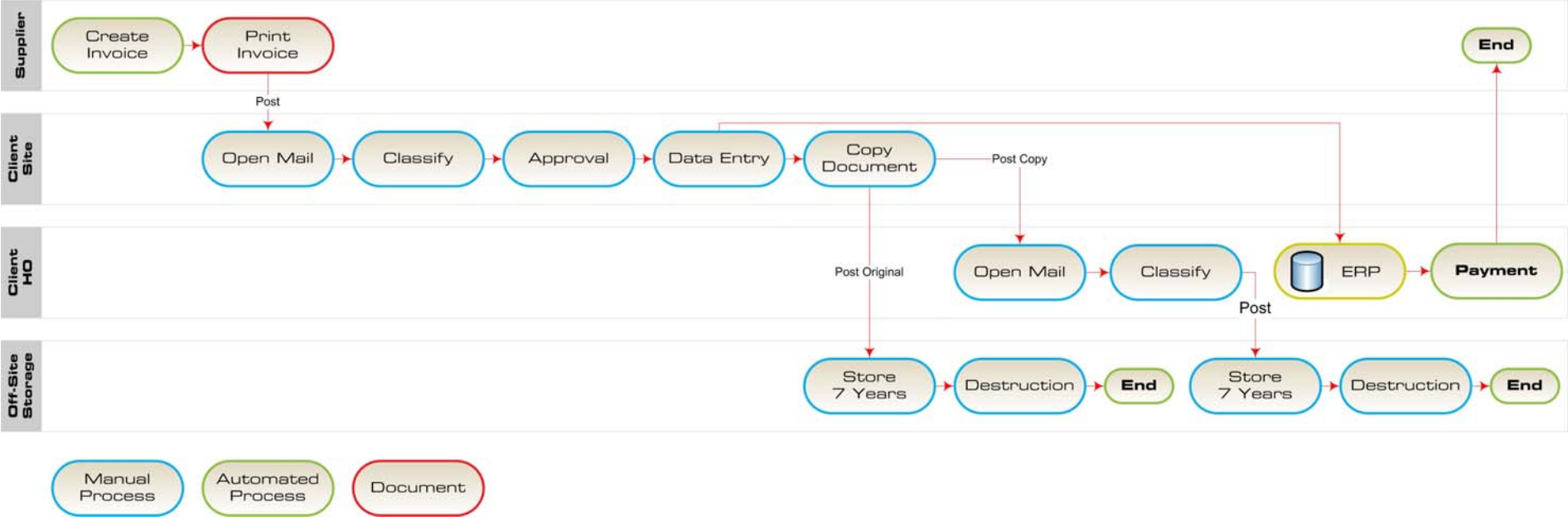
Advances in digital technology and the growth of information networks are helping organisations move into the digital world. More and more processes such as accounts payable are going online to streamline the process; saving time and money. Another major factor is the environmental impact of these outsourced online systems, are they really helping the environment? The obvious answer is yes, removing paper from any process is going to benefit the environment, but the Converga LCA can now confirm this. This LCA addresses all the elements involved in an outsourced paper or an outsourced digital invoicing system including the effect of IT equipment, power consumption of servers and routers, and the transportation to and from work for accounts payable staff.

Three systems were recorded

In the assessment, three billing processes were compared: Pre-Converga in-house customer system, Converga outsourced – paper system, and Converga outsourced – digital system.

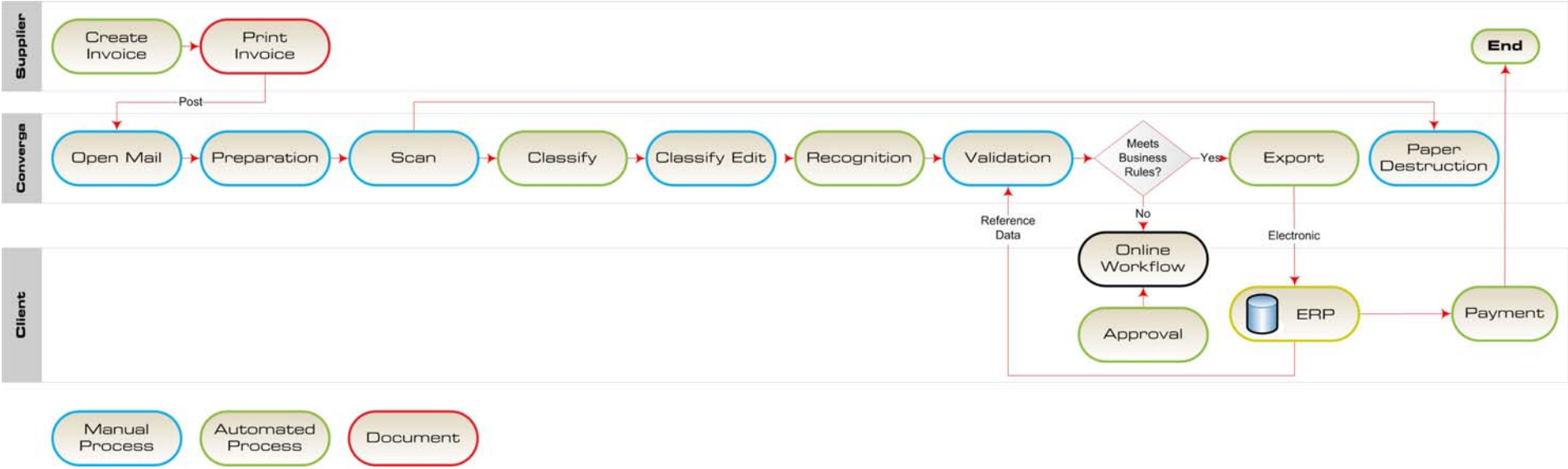
1. Pre-Converga (in-house)

In this system, one copy of an invoice is mailed to the client’s site for approval and one copy is mailed to the client’s head office for classification. The invoices are stored off-site for seven years before being shredded. All the site employees (30) used the train everyday to get to the accounts payable site.



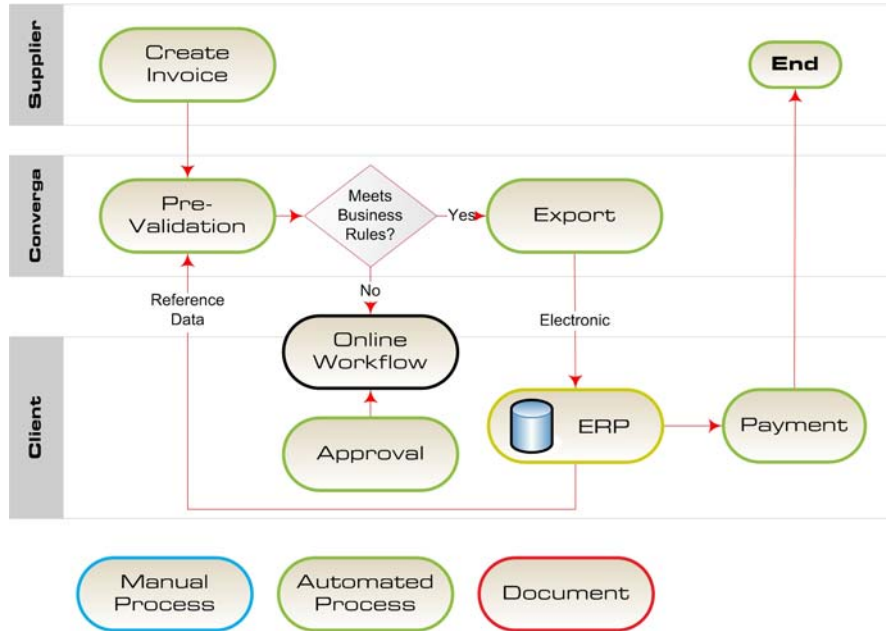
2. Converga outsourced – paper

In this system, paper invoices are mailed to Converga where they are scanned and digitised, they're then treated as digital invoices for invoice validation and payment.



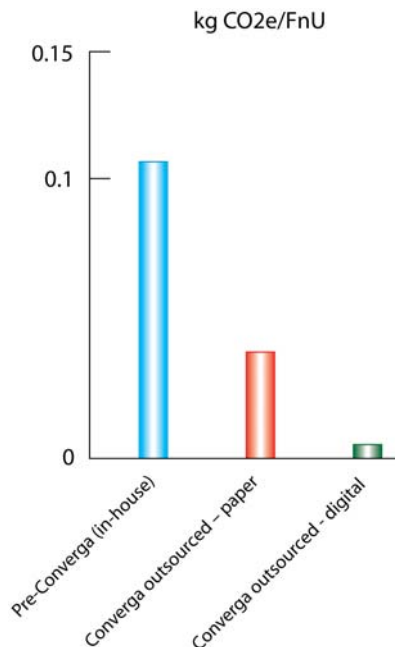
3. Converg​a outsourced - digital

This system uses only electronic versions of invoices. As a result the transfer and validation of invoices are only done electronically using computers, networks and servers.



Final Results

The graph below represents the green house gas intensity results kg CO₂e/FnU per invoice for the three systems described above.



The final assessment endorses the practice of using outsourced paper invoicing or outsourced digital invoicing and the environmental claims of both. From the assessment we were able to determine that for every 1 million invoices, Converg​a's Paperless Accounts Payable solution would save approximately 800 tonnes of CO₂ and 3,200 trees.

Some interesting findings:

- Using recycled paper dramatically reduces environmental burdens. Paper contributes significantly to an environmental footprint and by using recycled paper you can easily enhance conventional invoicing system's environmental performance. For instance, when recycled paper was tested, *Converga outsourced - paper* GHG burden improved by 13%.
- Network related environmental burdens are negligible - compared to other elements of the digital system, network equipment consumes a very small amount of energy.

The full report goes into a detailed description on all factors considered in the environmental impact of each of the above systems. The report can be downloaded at www.converga.com.au.

About Converga

Converga began operations in 1994 as a mailroom service provider, and as the demand for Information Management services increased we emerged as professionals in Australia and New Zealand in Business Outsourcing and Business Co-Sourcing services.

Converga has a range of office and business solutions which use imaging, data capture, document management and workflow technologies to provide clients with real competitive advantage. It's our business to rationalise, re-engineer and automate the workflow processes in organisations. Ultimately we turn data into valuable information and help drive enterprise-wide cost savings. Also, importantly for today's organisation, our solutions help our clients reduce their impact on the environment via our paperless solutions and our pursuit of the truly paperless office. Visit www.converga.com.au for more information.

About Hatch

Hatch supplies process and business consulting, information technology, engineering, and project and construction management predominantly to the mining, metallurgical, manufacturing, energy and infrastructure industries. With 65 offices worldwide, Hatch is a leader in environmental sustainability design, assisting companies incorporate sustainable development principles into their business practices, process design and new business planning. Visit www.hatch.com.au for more information.