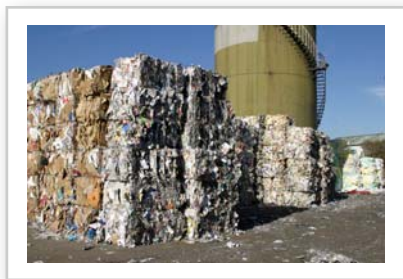


# How Online Planrooms are Reducing Our Carbon Footprints

It turns out that Kermit the Frog didn't know what he was talking about when he said "it ain't easy being green". There are some aspects of the greening of the construction industry that are not only easy, they are more profitable. One of the simplest things to do that has a significant impact is to reduce the amount of paper used to build a building. The Southern Interior Construction Association has been leading the way on this for years and the impact is startling.

Anyone who has been around the business for a while understands just how much paper is printed and distributed throughout the design and construction of a project. It is not uncommon for 60 to 100 sets of drawings and specifications to be printed through the design development, permitting, tendering, construction and as-built phases of a project. Added to that are contract documents, shop drawings, meeting minutes, change orders, invoices and a plethora of other pieces of paper required to get the project done.

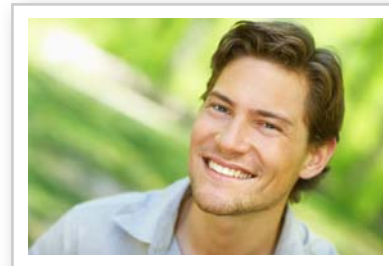
Since Oct 15th, 2000 SICA's online planroom has hosted the tender documents for 11,573 projects. Aleda Styan, who manages the SICA Planroom in Kamloops has witnessed the practical impact this has made. "We've noticed a big change in the way our members are accessing and working with plans and specifications since



we've posted documents online. Many of them no longer drive to the physical planroom. It is way easier for them to view the plans online and then either print them in their office or place an order for only the pages

they need." Additionally she notes that for items like specifications there is often no need to print them at all. "The impact is very positive. Members are using less time, less paper and less gas."

A more detailed look at the numbers behind those observations reveals just how big an impact the online planroom has had to date. Using conservative estimates of the number of pages of paper reduced per project and the number of reduced trips to



the planroom for members, Chart 1 shows that almost 469,282 tons of CO2 equivalent or Greenhouse Gases were avoided. That is the equivalent of taking 334 cars off the road for a year. A small forest equalling 1,982 trees were saved. The reduced Sulphur Dioxide emissions are the equivalent of taking 389 18-wheelers off the road for a year.

Dave Robertson is the CEO of Infinite Source Systems, the

*"The impact is very positive. Members are using less time, less paper and less gas."*

company that provides SICA with the technology to operate its online planroom. "We are very proud of our relationship with SICA and our many other planroom clients. Together, our organizations have made a very significant impact on both the environment and the way business in the construction industry is conducted." Infinite Source also provides document control services to many Public agencies, General Contractors, Developers and Architects. "We are really excited at the changes that are happening in the industry. Our objective is to help our clients drive increased profits through faster, easier, greener project delivery and SICA offers a fabulous example of what can be achieved."

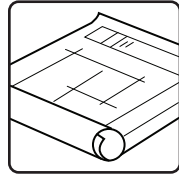
A very common icon used to represent the construction industry has always been a roll of 'blueprints'. With the kind of impact that electronic document distribution is having on the industry they may well come to be referred to as 'greenprints' in the future.



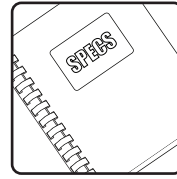
# Reduced Environmental Impact for SICA projects since 2000



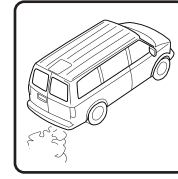
**11,573**  
Projects online  
since Oct. 15,  
2000



**100**  
Average  
reduction in  
drawings  
per project



**500**  
Average  
reduction in  
spec pages  
per project



**20**  
Average Trips  
to planroom  
eliminated  
per project

**284.95**  
tons of  
WOOD

That's enough wood for the equivalent of 1,972 trees.<sup>1</sup>

**3,153.12**  
million  
BTU's

That's enough btu's to heat over 34 homes for an entire year.<sup>2</sup>

**2,144.16**  
pounds of  
SO<sup>2</sup>

That's more Sulphur Dioxide (SO<sub>2</sub>) than 389 18-Wheelers make in an entire year.<sup>3</sup>

**467,674.5**  
pounds  
GREENHOUSE GASES

That's more Greenhouse Gases than 42 cars make in an entire year.<sup>4</sup>

**1,567,781**  
gallons of  
WASTEWATER

That's enough wastewater to fill 2.38 Olympic-sized swimming pools, or 62,711 bathtubs.<sup>5</sup>

**187,256**  
pounds of  
SOLID WASTE

That's enough solid waste to fill almost 7 28,000lb Garbage Trucks.<sup>6</sup>

The environmental impact of the traditional production and distribution of project drawings and specifications at the bidding stage alone is clearly demonstrated by this example. Even the very conservative estimates of the reductions associated with digital distribution used here prove to deliver a significant positive environmental impact. These important environmental benefits are achieved using a process that is also good for your business. PlanSource also helps companies save time, reduce costs and increase project accountability which all contribute to a better bottom line.

Call today (604 294 6557 or toll free at 1 866 294 6557) or visit our website [www.plansource.ca](http://www.plansource.ca) to learn how Architectural firms, General Contractors, Developers, Planroom Operators and Owners are improving the environment and their businesses.

In addition to the above mentioned impact, these projects would have created these additional waste products: ✕ 1496.34 million btu's Purchased Energy (16.44 homes/yr), ✕ 1513.68 pounds Nitrogen Oxides (NOx) (5.84 18-wheelers/yr), ✕ 1021.86 pounds of Particulates (91.23 buses/yr), ✕ 516.81 pounds Biochemical Oxygen Demand (BOD) (2.79 homes/yr), ✕ 833.65 pounds Total Suspended Solids (TSS) (4.03 homes/yr), ✕ 7540.4 pounds Chemical Oxygen Demand (COD) (16.19 homes/year), ✕ 176.71 pounds Hazardous Air Pollutants (HAPs), ✕ 456.89 pounds Volatile Organic Compounds (VOCs), ✕ 27.94 pounds Total Reduced Sulfur (TRS), ✕ 76.6 pounds Absorbable Organic Halogens (AOX).

<sup>1</sup> Assumes a mix of hardwoods and softwoods 6-8 inches in diameter and 40' tall .

<sup>2</sup> The average U.S. household uses 91 million BTUs of energy in a year.

<sup>3</sup> Sulfur dioxide contributes to air pollution problems like acid rain and smog. The average 18-wheel truck emits 5.5 pounds of SO<sub>2</sub> in a year.

<sup>4</sup> The average car emits 11,013 pounds of CO<sub>2</sub> in a year.

<sup>5</sup> Based on a 25 gallon bathtub. One Olympic-sized swimming pool holds 660,430 gallons.

<sup>6</sup> One fully-loaded garbage truck weighs an average of 28,000 pounds (based on a rear-loader residential garbage truck.