

The Local Authority Story

August 2008 – Metric version

A new green frontier for local government

Reducing carbon emissions from the backlit displays in your community

As global warming climbs the political agenda, local governments are getting serious about reducing carbon emissions.

But too many municipalities and state governments have overlooked an important source of greenhouse gas emissions: backlit display advertising in public spaces.

Currently, millions of backlit displays are ultimately under local government control – in train stations, bus stops and public buildings. Today, these displays are wasting far too much energy and generating far too many greenhouse gases – simply because local governments don't know there's a better way.

The trouble with fluorescents

Backlit displays have traditionally been illuminated by fluorescent tubes. Increasingly, this dependence on fluorescent lighting has become unsustainable:

- Fluorescent tubes waste energy.
Patented in 1901, they're last century's lighting technology. They convert only 7-10% of their energy into light. The rest is wasted as heat – which often needs to be removed by power hungry air conditioning
- They demand costly, regular maintenance.
Tubes fail suddenly and unpredictably, forcing annual replacement – further waste and cost.
- They create hazardous waste.
Fluorescent tubes are hazardous to manufacture and expensive to dispose of, with the risk of releasing mercury into the air, water and food chain.
- They lose efficiency if turned off and on.
Forcing 24 x 7 use, even if not required.

Until now, there has been little choice. Fluorescent tubes were the only option for the millions of backlit displays in public spaces.

A better way

Now there's a new way to backlight advertising displays that costs less and reduces energy use by as much as 88%, dramatically reducing the carbon footprint of each and every display.

We call it Sustainable Backlighting™, from Bright Green Technology, and it's changing the way local governments look at their display contracts.

Sustainable Backlighting™ uses a new generation of solid-state LED technology to drive down the cost, carbon footprint and maintenance burden associated with fluorescent tubes.

- Bright Green systems use one-eighth the energy of a traditional 'tube box'.
- Bright Green systems last longer – typically 5 or more years before needing a fast, simple and safe LED replacement (with no hazardous waste to dispose of).
- Bright Green systems are zero maintenance, with no need for costly annual re-tubing and tube disposal.

By using less energy, lasting longer and requiring no maintenance, Bright Green systems don't just reduce the carbon footprint of every display, they also pay for themselves.

Carbon footprint: Bright Green vs. Tubes

A single, tube-lit, 6-sheet poster lightbox puts 6-8 times more carbon into the atmosphere than the equivalent Bright Green solution (and incurs 6-8 times the energy costs):

	Fluorescent Tubes	Bright Green
One Year		
Illumination	6 x 58W tubes	2 x LED EdgeStick
Total Power	348W	58W
Energy cost/year*	£305	£51
Carbon emissions**	1,524 kg/year	254 kg/year

* £0.10 per kW-hr

** @ 0.5 kg of carbon per kW-hr

Over five years, the needless carbon emissions really add up:

	Fluorescent Tubes	Bright Green
Five Years		
Energy costs*	£1,525	£250
Carbon emissions**	7.5 tonnes	1.25 tonnes

Putting it into perspective

- A single six-sheet display using fluorescent tubes (x6), puts over 1.5 tonnes of carbon into the air every year.
- The equivalent Bright Green display only generates 254 kg of carbon – saving 1.27 tonnes of carbon, every year, per display. This is about the same as an average western household's annual heating footprint (1.49 tonnes) for each and every six-sheet display in the world.
- Just replacing the world's 6-sheet displays with Bright Green systems would save 30,000 MW hours of energy every single day (not even including the larger billboards). That's 15,000 tonnes of CO₂.

The green initiative that pays for itself

A single fluorescent tube box (with 6 tubes) costs £1,655 more over five years than the Bright Green equivalent:

Five-Year Savings	Fluorescent Tubes	Bright Green
Tube/ballast cost	£115	--
Tube recycling	£30	--
Labour (planned/unplanned)	£240	--
Energy	£1,525	£255
Total	£1,910	£255

Clearly, specifying Bright Green technology for all display contracts is a win-win scenario for the local authority, the contractor – and the planet.



A sustainable system for any site

There's a Bright Green solution for every application, from six-sheet bus shelter to backlit billboard. Two different systems are on offer:

- Bright Green Edge™ – the super-thin, edge-lit system suitable for 6-sheets and smaller.
- Bright Green Matrix™ – the patented LED Suspended Array™ technology that's scalable and retrofittable.

Chosen by top contractors around the world

Bright Green solutions are in daily use by some of the industry's most progressive contractors, including CBS Outdoor, Clear Channel and Titan Worldwide.

The systems are easy to install and can be retro-fitted into an existing box in about fifteen minutes.

About Bright Green Technology

Bright Green Technology is the technology and market leader in solid state LED backlighting systems for the advertising and signage industries.

Bright Green develops and markets proprietary backlighting systems built on our own patent-protected technology.

Our mission is to dramatically improve the environmental performance and ROI of all backlit advertising and signage by replacing fluorescent tube boxes.