EFI VUTEk UV Solutions
Environmental Advantages Over Latex Solutions.

For the printing industry, becoming “greener” is the sum of many factors – the printer, printer components, inks, and energy and water costs to name just a few. Although there are many “environmentally-friendly” alternatives available today that are a step in the right direction towards balancing your business and environmental requirements, the green advantages of EFI™ VUTEk® UV solutions over latex solutions are substantial.

The Importance of Green Solutions in Today’s Print Businesses
There is no doubt that the print industry takes the environment seriously. However, in today’s competitive business climate, many print companies struggle to balance their own environmental commitments and global regulations with customer demands for greener solutions that work across a broad range of short-run applications and substrates.

Inks
Environmentally-friendly or green inks are defined as inks that contain the highest quantity of bio-derived, renewable raw materials available and the lowest possible Volatile Organic Compound (VOC) levels.

- Latex Disadvantage – In order for latex inks to work on more substrates, the chemistry is altered to contain co-solvents, which are used to soften the media so the ink binds on top of the media. The co-solvents in the latex inks contain up to 20% VOCs.
- EFI UV Advantage – EFI UV curable inks, on the other hand, contain up to 50% monomers and oligomers that are naturally derived from renewable resources, such as plants and biomass. These inks contain virtually no (less than .08%) VOCs and do not contain heavy metals, such as antimony, arsenic, cadmium, chromium, lead, mercury and selenium. Also, some regulations, such as the U.S. waste regulations (RCRA), do not consider them a hazardous waste.

Substrate and Media Flexibility
Your profitability and customer satisfaction hinge on the number of substrates and media you can print without creating excessive waste. Choosing a flexible printing system and inks become critical to your business success.

- Latex Disadvantage – Latex printing systems are limited to printing on flexible media only. In order to produce rigid applications, a self-adhesive vinyl must be printed first. The self-adhesive vinyl, then, is applied to the final rigid substrate, some of which require a special coating. These multi-layer substances are often difficult to recycle, and these extra steps increase the cost per printed image and reduce margins.
- EFI UV Advantage – EFI UV curable inks are formulated to print direct on a wide range of flexible and rigid substrates (e.g., PVC, wood, foamcore, coroplast, aluminum, vinyl, polycarbonate, as well as a growing number of environmentally-friendly and recyclable materials) and do not require any special coatings, saving you time and money.
Energy Consumption
Using huge amounts of electricity and water doesn’t add up to a smaller footprint.

• Latex Disadvantage – For proper substrate adhesion, the printed image must be heated to an extremely high temperature, 203 degrees F (95 degrees C). If you are replacing solvent technology, your energy usage and, therefore, cost will increase. Since the range of substrates that latex is capable of printing on is limited to flexible media, these printing systems consume greater amounts of energy to complete the multiple step process of producing rigid applications. Overall productivity (square feet or square meters per hour of output) on a latex printing solution is generally lower than UV printing solutions, resulting in longer production cycles and more energy consumption to complete jobs.

• EFI UV Advantage – EFI VUTEk UV-curing printing systems are some of industry’s most productive printers available today. And their inherent versatility allows you to print direct to rigid and flexible substrates, eliminate set-up and make-ready time and costs, and turn jobs faster with fewer steps.

There is no perfect solution, but understanding the environmental impact of the choices that are available today will bring you a few steps closer to achieving a smaller footprint and greater profitability.

Nothing herein should be construed as a warranty in addition to the express warranty statements provided with EFI products and services.