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Water & Steam Experts

Since 1995

Water System Green Technologies



Part II

This article is the sequel to “Water System Green Technologies” by Akiki Engineering, available on our website at <http://www.akikieng.com/articles> .

Our motivation behind these articles is to encourage the use among consultants of environment-friendly technologies.

In the previous article, we introduced "Green" technology and discussed the hazards and solutions of:

- Brine water discharge from softeners
- Electric consumption of flush valves
- Water consumption of urinals

We also presented:

- Baseline flowrate standards
- Calculations of savings

This article extends these thoughts to:

- Costs of hand dryers & towel dispensers
- Plastic waste reduction by installing water coolers and drinking fountains

It also presents some “green factors”:

- Recyclability of material
- Product lifetime

Supporting documents are available at <http://www.akikieng.com/articles>

“Green Technology” is usually linked to: solar hot water, wind power, CO2 emissions, electric cars... The US Green Buildings Council defines it as:

"Green has become the shorthand term for the concept of sustainable development as applied to the building industry. Also known as High-performance buildings, green buildings are intended to be environmentally responsible, economically profitable, and healthy places to work." (Reference Guide October 2006)

Also, the Qatar Green Building Council's motto is: *"We don't inherit the environment from our fathers, we borrow it to give to our children."*

The question is How? Humans have already proved that their collective efforts can cause world imbalances (e.g. financial crises, global warming). However, today we understand that the responsibility for preserving balance in any system, including the natural system, trickles down from the governmental level to the individuals level.

At **Akiki Engineering** we focus on providing water and waste water treatment materials and systems, during the proposal and construction phase, that are of highest quality *and* most recent technology. Our business line is all about protecting and preserving the most critical resource to life: **Water**. In our business, compromise today does not disappear. It haunts us at a bigger cost tomorrow.



Hand Dryers and Towel Dispensers: Running Costs

Hand dryers may come at a less cost to the environment than towel dispensers *only if* designed properly.



ASI's hand dryers are automatic and powerful (12 seconds drying time), achieve maximal hygiene by being sensor-



operated, are waste efficient as they don't use towels, and are expected to live up to 10 years.

In areas where electricity costs surpass towel waste costs, towel dispensers should be designed for optimal performance and hygiene. The ASI "No-Touch" series achieves so by equipping the dispensers with wireless sensors. Also, the products are stainless steel.



Whether it's hand dryers or towel dispensers, ASI series come in a wide variety of designs and sizes. Get the most recent designs from the ASI ROVAL Collection.



Drinking fountains & water coolers: Plastic waste reduction

One of the several components of human waste is plastic waste. Eliminating this problem from the core can be achieved by providing drinking water in public spaces by drinking



fountains and water coolers. Of course, not any kind of product would do: environment friendliness, durability, efficiency, and recyclability are of the essence.



Elkay's drinking fountains and water coolers achieve all the points above by:

- 0% ozone-depleting components
- built of stainless/galvanized steel
- 64% more efficient than US standards
- 40% less water usage

Some Green Factors

Some materials are more recyclable than others. Worth mentioning are:

- Stainless steel: 69% recyclable
- Galvanized steel: 100% recyclable
- Plastic
- Fiberglass

Standards in the water treatment industry require product lifetime 10 years.

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