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The Influence of One

As I was walking on the beach watching the colossal sun project orange and pink visions across the evening sky, a monarch butterfly struggled to flap its wings in the sand. I bent over to offer my finger as a perch and picked up the Monarch, when it immediately flew into the sand again. A second time, I reached down to offer help, as the Monarch grasped my finger with intensity, I covered it with my other hand and walked to a large fallen branch farther away from the water. I gently placed the Monarch down on the highest part of the branch while noticing a gust of wind. The Monarch sat moving only one wing. I brushed my finger over the second wing trying to wipe the sand off, but to no avail. As I stood there watching, the wind grew stronger and the Monarch began to flap both wings at the same time. Walking away, I could still feel the grasp of the Monarch Butterfly on my finger.

How can such a small living creature be so strong, showing such a strong determination to live? How conscious are the seven billion humans on this planet of the impact of their human footprint toward the other living creatures? Is it possible to protect the venerable living creatures and people of this earth? What environmentally sustainable efforts can be implemented?

According to the Environmental Protection Agency, in 2009, Americans put in the landfill 232 million tons of trash equaling a per capita disposal rate of 4.23 pounds per person, per day (EPA Facts and Figures). This waste data is only indicated for residential and commercial residents. The construction and demolition generated landfill waste is calculated at 545 million tons (Beck). An overall picture of the annual waste in the United States can be visualized by lining up average size garbage trucks from New York City to Los Angeles. These waste trucks would be lined up more than 100 times across the country for one year supply (Beck).

Many Americans have instigated significant changes and more than 61.3 million tons of Americas' solid waste has been collected and processed for recyclable in 2009, as well as 20.8 million tons of food and yard compose (EPA Facts and Figures). Additionally, more research is being conducted for alternative energy production from solid waste through methane gas as well as innovative landfill technology for environmental protection and social responsibility.

Though not seen in America, 3.575 million people die each year from water-related disease from poor sanitation and hygiene (WHO). The earth's water supply contains only 2.5% of fresh water. Though the World Health Organization is on track with the Millennium Development Goals to provide safe drinking water to half the proportion of people without access to safe water by 2015, there are still 884 million people who are without access to safe water (WHO). As fresh water shortages continue, efforts to conserve water become more prevalent.

Water conservation efforts are being promoted with sustainable concepts initiated by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) associated requirements for credit compliance for building certification. The water conservation credits support decreased storm water runoff and increased filtration as well as rainwater collection and gray water reuse for irrigation and flush plumbing fixtures. Other credit requirements include low-flush and low-flow plumbing fixtures to decrease potable water consumption.

Continual promotion of water conservation is evident for all building types before, during and after construction.

Poor indoor air quality can be manifested through combustible sources, building materials and products, finished building materials, wood products, cleaning products, radon, etc. The list can go on and on. The degree of poor indoor air quality can depend upon the amount of the pollutant material, as well as the degree of harmful chemical. Exposure to harmful indoor chemicals can produce acute illness (i.e. asthma) as well as chronic illness (i.e. respiratory diseases) (EPA). Since more than 90% of an individual's time is spent inside a building, increased outdoor air ventilation can be first initiative to improve indoor air quality. Decreasing the use of materials or products with high Volatile Organic Compounds (VOCs) can ensure a lower pollutant concentration in the air as well as an increased indoor air quality.

While USA has decreased its regional energy usage (- 2% kWh/ capita) and growth from 1990- 2008, China (111% kWh/ capita) and the Middle East (79% kWh/ capita) show a significant increase (Energy in Sweden 2010). Coal continues to be the largest source of fossil fuel for the twentieth century with China as the highest user (48%) followed by Asia (19%) and then USA (16%) for 2010. Since 2010, 16% of the world's energy consumption comes from renewable energy sources, biomass, hydroelectricity, wind power, solar power, and geothermal, which are growing very rapidly (REN21). A decrease in fossil fuel consumption (Green House Gases) for energy resources can help to decrease global warming emissions that could negatively impact climate change.

Some people are not aware of the environmental affects of the human footprint. It could appear that any solution might be small and insignificant. Can one person make a difference? It took Thomas Edison 14 months and 1400 attempts to make the light bulb. What if this one person decided to stop trying after 100 times? One person, Ray Anderson, could have thought that his company would never be big enough to make a difference for sustainable design. What if these people did not run the race set before them? Electricity could be in a different form. Interface's commitment to footprint reduction for carpet manufacturing might not have developed and implemented such significant discoveries.

The impact to improve the earth's environment has already started by one

person taking action and telling another. Many other people have continued to step forward to lead the path for healthier indoor environments as well as energy reduction, water efficiency, and decreased landfill waste. There is no other planet like earth that humans can grab when natural resources of this planet are gone. The influence of one can promote the next generation take more steps to move beyond where we have already come.

How about you? What action steps will you take this year to be part of the influence of one?

“That’s one small step for man, one giant leap for mankind.”

Neil Armstrong
July 21, 1969

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