

#### Connecting the Circle -- A Message for Indian Country

The circle... a symbol of unity, strength, wholeness, shelter and ritual. With no beginning and no end, it also reflects our connection with everything. All that is with us will always be with us. There is no such place as "away" and the effort to throw things "away" has created polluted land, polluted water and polluted air. The Earth itself is a circle and all that we throw away is here in that circle. The time has come to return to a way of living that is in harmony with nature and to consider the effects of all that we do unto the seventh generation. The poisons in the circle must be cleaned up, but more importantly, the flow of pollutants into the circle must be controlled. Prevention is the ultimate control. The awareness to see natural systems as circles has guided some of today's tribes to employ technology and timeless environmental values to accomplish good things for all people for all time.

~ Maƙwa Gaa Nii bawit -- Chippewa

### ~ The Mohegan Sun ~ A Pollution Prevention Success Story

It all began with a vision. Chief Ralph Sturges of the Mohegan Tribe in Connecticut had a vision of building a casino that would benefit the members of his tribe without harming the natural environment. He wanted the Mohegan Sun to reflect his values of honor, integrity, perseverance and mutual respect.

The Chief enlisted the help of Dr. Norm Richards to make this shared vision become a reality. Using the framework of "systems thinking" to analyze how different parts of the whole are connected, Richards planned ways of preventing pollution from the ground up, focusing on the areas of energy use, transportation and food service. The Mohegan Sun is a model of saving money through energy and resource conservation.

The guiding light for their success was the Chief's motto: "It has to be good for the environment and it has to be good for everyone."



# For the Seventh Generation

## Pollution Prevention through Energy Efficiency

The majority of energy used today is generated by fossil fuels. The burning of fossil fuels is also the largest contributor of  $CO_2$  (a greenhouse gas) to the atmosphere. One of the keys to "systems thinking" in the area



of "Green" power is the conservation of energy. Using less energy results in less pollution. Using less energy also saves money.

A central component of the energy system at the Mohegan Sun is the use of fuel cells to generate electricity. Due to their status as sovereign entities, recognized tribes can offer unique opportunities to businesses. This made it possible for the Mohegan Sun to install fuel cells at no cost by making an agreement to be a test site for the new fuel cell technology. Dr. Richards has installed monitoring equipment throughout the heating and cooling system which allows all energy data to be collected and recorded by computers.

Fuel cells fed by natural gas provide electricity with more efficiency than coal fired power plants. Generating electricity on the Mohegan Sun site also decreases the energy loss that would result from transmitting electricity over a long distance. A byproduct of fuel cells is pure hot water which is used to preheat water for the boilers and is also used for the chillers, which further decreases energy usage at the Mohegan Sun. Another way of conserving energy is the installation of infrared sensors in all Mohegan Sun guest rooms which automatically reduces the air conditioning and heating loads when a room is not occupied and resumes the load when occupancy is detected. These energy saving features also contribute to resource conservation.

#### Pollution Prevention through Reduced Emissions

The reduction of  $CO_2$  emissions from cars is being addressed by including hybrid vehicles in the Mohegan Sun fleet. Diesel vehicles at the facility also run cleaner by using reformulated diesel fuel. A partnership between the Mohegan Sun and the local school district allows them to save money by purchasing bulk amounts of the cleaner fuel. In addition to reducing emissions, the Mohegan Sun is connecting the  $CO_2-O_2$  circle by reestablishing rain forests on marginal farm lands in Costa Rica.

### Conservation of Natural Resources

To see resource conservation in action, one needs only to look down in some areas of the Mohegan Sun where the hardwood floors are made of bamboo. Bamboo grows rapidly and provides beautiful flooring with more durability than traditional hardwoods. The result is less demand on slow growing hardwoods and use of a more sustainable resource that will also save money in the long run. Conservation pays.

# For the Seventh Generation

### Pollution Prevention through Recycling

The best way to help the environment is to prevent pollution from entering the circle, but it also helps to prevent pollution by recycling waste products. The Mohegan Sun has an interesting approach to recycling with the food service in the employee cafeteria where meals are provided free of charge. All employees empty their cups and separate the waste before leaving the cafeteria. Waste materials that can be recycled are then placed in individual collection containers, including used cooking oil which is sold for income.

The Mohegan Sun also has an arrangement with a local hog farmer for the recycling of food waste. Each day food waste is placed in barrels in a separate refrigeration unit. The farmer picks up the barrels, pasteurizes the food waste and feeds it to the hogs. The circle begins to connect when pork is purchased from the local farm by the Mohegan Sun. The final connection is in a future plan to install a "digester" that will generate methane (natural gas) from manure which will be used in the fuel cells to generate electricity.

### Stakeholders -- Making the Circle Strong

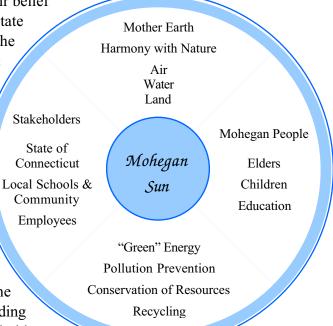
When partnerships are formed and stakeholders are included in a pollution prevention project, more people have an interest in the success of the project. Asking everyone who will be affected (stakeholders) to join in the project brings all views and opinions to the front, where they can be addressed in creating a shared vision.

A big part of the Mohegan Sun's success comes from their belief in doing things in a way that is good for everyone. The state of Connecticut has benefitted from a partnership with the Mohegan Sun to complete an environmental impact analysis, as well as getting a share of the revenue from the casino. The local community has benefitted in several ways such as increased income for local businesses and a new fire engine which was donated by the Mohegan Sun. Even the employees of the Mohegan Sun are treated like respected stakeholders, which is evident from their friendly and helpful service to the guests.

## Providing for the Mohegan People

The income of the Mohegan Sun is directed first to the elders and the children. In doing so, an ancient understanding is honored. The elders are the living history of the tribe, holders of the customs, ceremonies and dreams for survival. The children are

the future and receive the training they need to carry on another cycle of life. The Mohegan Sun pays honor to this tradition by providing state of the art facilities for the care of their elders and young children, as well as providing scholarships to all young people of the tribe who desire to further their education.





### How to Make Your Vision a Reality

Each tribe or Alaskan native group has its own unique situation and specific needs in the area of energy use and pollution prevention practices. The process of "systems thinking" that was used at the Mohegan Sun can be used just as effectively on a smaller scale. A strong grant application will contain evidence of stakeholder involvement and partnerships working toward a common goal. It is possible to create wellness and abundance while walking gently on the earth. No one can do everything, but everyone can do something. Each small change will add up over time to produce a "ripple effect" of awareness and action.

