

A Sustainable Environment: Our Obligation to Protect God's Gift

by
George P. Nassos

Creative Sustainability Strategies by DePaul University Students

I have been teaching a course on sustainability strategies for many years, and in lieu of a typical final exam where the students are asked to answer questions, I take a different approach. I require each student to take a strategy learned in class and apply it to their place of work and tell me how it will improve their company environmentally, socially and economically. For students not working, they have the option to select an existing company that could use some help or they can create a new company. They are required to write a paper on their proposal but more important, they are required to make a presentation so the rest of the class can learn from their effort. Here is a small sample of ideas presented by students earlier this month.

Hospitals are producing large quantities of paper waste in the U.S. and most of it is copy paper which contains patient health information that must be protected and eventually destroyed. So the typical way of destroying this paper is by a waste company that will shred it. Rather than shredding or pulverizing protected documents, a new company is created that will use a chemical like acetone that can remove the printed ink from the paper while not damaging the paper itself. The blank pieces of paper are then treated and dried to be restored to printer-ready quality. This is an example of the circular economy of collecting, removing, treating and recirculating the paper.

Up until 20 years ago and for the previous 50 years, about 70% of the U.S. population was affiliated with a Christian religion. During the past 20 years, this number has decreased to about 50%. This means that there are probably many churches that have been shut down. This raises a question as to what should be done with empty churches. A new company called, Lamm – the German word for lamb, is being created to solve this problem. Lamm will be a real estate consulting company specializing in churches and will work with general contractors to match with churches for major renovations. It will also work with neighboring churches to pool resources as an example of the sharing economy. Lamm has already researched the E.U and U.K. that has experienced this decline in religious interest as what has been done there. Some of those churches have been converted to a large bookstore, an educational academy, an ice skating rink, and a kindergarten where classrooms occupy the lower floors while the top is used as an indoor play area. Here the exterior area includes a racing car track. In the U.K., a former church is now used as a recording studio while another was converted to a gymnasium. In Sweden, a former Greek Orthodox Church was converted to an entrepreneurship center for small business startups. Why construct new buildings for these applications when an existing building is waiting for you.

A bookstore company in China has warehouses strategically located around the country. However, with the decline of print reading, these warehouses are not used to their full capacity. So this student is recommending a warehouse sharing system to complement the increase in the

need for more warehouses required as production increases in China. In addition, this company will provide logistic services for its clients.

Another student works for a sports and fitness center and identified many opportunities for implementing sustainability strategies. Some of the recommendations include the reduction of single-use plastic cups, more efficient use of the water, and the addition of renewable energy like solar panels on the roof. Another recommendation is to add exercise equipment that can generate electricity by the motion of the club member.

Music festivals around the country draw very large crowds and generate huge quantities of waste. An annual festival in Chicago draws about 135,000 people over three days which use about a quarter of a million plastic drinking cups. The recommendation is to charge a small deposit for a reusable cup that can be returned to collect the deposit. The cup can then be cleaned and reused. The cup can also be returned but have the deposit donated to a charity. Since these reusable cups will have some printing to advertise the event, the cup can also be used to print the schedule on it. This would eliminate the need to have a printed schedule on paper that is used and disposed of each day.

A student working for a construction company is recommending many ways to reduce energy consumption. First, an energy use analysis should be performed to determine where improvements can be made. It would probably recommend simple solutions like energy saving devices and appliances, and switching to LED lighting. The biggest recommendation is overall sustainability education and communication to all the employees. Establish goals and practices and communicate them.

Another student owns a six-apartment building that can use a number of improvements. He is planning for a number of different strategies, such as: Separate the organic waste to be used for composting. Add solar panels on a portion of the roof. Use the balance of the roof to grow vegetables. Provide more convenient bicycle storage to encourage the tenants to use the bicycles for transportation to the nearby business district. Add electricity to support recharging battery powered bicycles. Add a separate drain line for kitchen sinks, allowing for the possibility of adding a grey-water recovery system.

Another student that is working at DePaul made a number of recommendations that could be implemented at the university. Although the university has implemented many strategies, there are still more that can be added. There should be occupancy light sensors to turn off lights when unoccupied. Make the campus bottled-water free. Coordinate weeklong events throughout the campus to bring awareness and education to an environmental subject such as waste, recycle, water, energy, etc. And finally, publish an annual report to show progress to achieving preset goals.

I look forward to hearing what my students are planning as they are the future and the disciples that are helping make this world more sustainable.

