

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

by
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Energy Efficiency: Are We Ahead of Europe?

In earlier articles, I discussed the need to be more energy efficient and the need for stronger regulations to assist the public in achieving this goal. If we compare how well we are doing compared to, say, ten years ago, we have made considerable progress. But how well are we doing with respect to other countries or continents such as Europe?

Almost thirty years ago, I had the fortune to be relocated to Europe by my employer. I lived in Cologne, Germany with my wife and two children for about three years and had a great experience, not only from the business aspect but also from the cultural and social perspective. One day when I was in a meeting in a high-rise office building in La Defense, at the edge of Paris, the lights in the meeting room were going on and off every 10 to 15 minutes. After it happened several times, my curiosity forced me to inquire what was wrong with their lighting system. I was embarrassed to learn that the company depended on outdoor lighting and sensors were used to control the need of artificial lighting. On this particular day, it was partly cloudy and the artificial lighting turned on whenever a cloud shaded the sun. Now we are employing that same technology, but it is thirty years later.

Our apartment in Cologne was about seven kilometers south of the office. I had to drive along the Rhine River on a four-lane road with, perhaps, five or six stoplights between my home and the office. The speed limit was 70 km/hr (~42 mph), but I didn't always drive at that speed. About half way between the stoplights, a different kind of traffic signal existed. They had installed digital signals advising the drivers how fast to travel in order to catch the next green light. If you were approaching a red light, the traffic signal would probably show 40 km/hr (24 mph) or, perhaps, 30 km/hr (18 mph) so the traffic light would turn green by the time you arrived at the intersection. If the traffic light ahead were green or about to change to green, then the previous traffic signal would show 70 km/hr. This system had several advantages: 1) traffic moved at a steady pace, 2) cars consumed less gas, 3) there was less pollution since the cars idled less, and 4) there was less stress on the drivers. Again, this existed thirty years ago, perhaps longer, and I have yet to see such a system in the U.S.

Another feature of the German roads was to have stoplights for side streets to turn green only upon demand. Consequently, cars traveling on main roads would never get a red light with no cross traffic. Doesn't that bug you when you sit at a red light with no cross traffic? We now use sensors in the roads to activate traffic signals, but we haven't learned how to use them as efficiently.

Last year, the City of Chicago started to use cameras to identify cars crossing intersections on red lights. A similar system existed in Germany thirty years ago where a

camera took two pictures of the car, a fraction of a second apart, which would take a photo of the license plate and also tell the authorities how fast the car was traveling. A few days later, a citation with a fee would show up at your home.

Another old city in Germany, Wuppertal, grew on either side of a meandering river and is about 15 kilometers long and three kilometers wide. In the early 1900s, the Germans built a monorail supported by struts that straddled either side of the river. This monorail is the primary mode of public transportation in Wuppertal as it meanders above the river. We now have this type of transportation at Disney World and a few cities, but Germany has had it for over a century.

Many countries throughout the world have a Ministry of the Environment, similar to our U.S. Environmental Protection Agency. On January 1, 2005, Sweden abolished its Ministry of the Environment and replaced it with the Ministry of Sustainable Development. The work of the new Ministry builds on the idea of the green welfare state, i.e. using new technology, construction and an active energy and environmental policy to drive forward the transformation and modernization of Sweden to benefit sustainable development, new jobs, growth and welfare. Sustainability, or sustainable development, is a relatively new concept in the U.S., but Europe is already looking ahead, rather than just protecting the environment.

We are moving in the right direction relative to environmental issues, but we are still lagging behind Europe. We need to learn from their initiatives, build on them, and hopefully, someday, pass them up.

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