Climate change and our individual impact

Conservation Pays

There's no doubt about it: our climate is changing. Seasons are becoming a thing of the past. But scientists disagree about whether or not mankind has caused those changes. Although the overall phenomenon has not yet been studied in depth, some maintain that the greenhouse effect, caused by man, is contributing significantly to climate change. On the other hand, there are many signs that climate changes occur cyclically and are influenced by an endless range of factors, the human impact perhaps being just a drop in the bucket. Still, does that relieve us of responsibility for the planet we live on and the environment around us?

The predominant greenhouse gas emitted into the atmosphere is carbon dioxide, pumped into the air by power plants, factories, and the engines of millions of cars and thousands of ships and planes. Our own bodies also play no insignificant part, each of us producing around a half ton of pure CO_2 per year. But the largest-scale emitters are undoubtedly power stations. Poland has the dishonorable distinction of being one of the world's leaders in harnessing almost exclusively coal-powered energy – far and away the most harmful to the environment and atmosphere. Despite international pressure, there is no clear prospect for when the Polish energy industry might shift to renewable sources. The only option that remains, therefore, is to learn to harness energy in economical and efficient fashion. This raises the question of what an average individual among Poland's 40 million inhabitants might be able to do in this regard. The answer, perhaps surprisingly, is: Quite a lot.

While it's true we have little influence over what source the energy we use comes from, we definitely can strive to consume somewhat less energy. We can start by simply wasting less of it: such trivial issues as leaving lights on in empty rooms, not closing the refrigerator door tight, heating up a whole kettle of water to make one cup of tea, or running a washing machine half-full. If we consider that we are not the only ones doing so and that every day there are millions of unnecessarily lit rooms, hectoliters of water boiled pointlessly, and thousands of refrigerators thawing with their door ajar, it becomes obvious that the electricity wasted globally would suffice to power a considerable-sized metropolis. Especially if we add to that the electricity consumed by devices that remain in a dormant state. Kept blissfully unaware by manufacturers, most people have no idea how much energy is consumed by chargers left plugged into the socket for our telephones or toothbrushes, by the transformers which power our printers and scanners, by our monitors, diode displays, and clocks. Nearly every household has a few such devices, which translates into tens of millions nationwide or billions globally. Even if we don't think about how much money we are spending senselessly, we are still consuming precious energy generated at the environment's expense.

We can think about energy conservation at home, such as when replacing light bulbs or kitchen appliances. Energy-saving bulbs provide the same amount of light as ordinary ones while consuming one-quarter of the power, and they also last several times longer on average. Many household appliances – dishwashers, washing machines, ovens, and refrigerators – come in several different energy-saver classifications. The better the classification, the less energy the appliance consumes to do its job. Perhaps seemingly small and insignificant, such ways of saving energy do indeed add up. Energy conservation is surely worth a try, especially since it costs us nothing aside from changing our own mindset. Others may also be encouraged to follow suit. By making such an effort we will be helping our planet and its climate better than those who chain themselves to railway lines to try to block the construction of nuclear power stations.

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And as far as atomic energy is concerned, unfortunately our public awareness of it is still based mainly on superstition. Poland is currently developing a research program of coal-nuclear synergy. The heat from a nuclear reactor can be used to produce hydrogen and oxygen through the breakdown of water. The oxygen can then be used in more efficient and ecological processes of transforming coal power into electric power, the hydrogen in recycling carbon dioxide from coal-fired power plants. We can therefore produce hydrocarbon fuels without CO_2 emissions. So perhaps it is not such a good idea to rebel against nuclear reactors? ■

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