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Indoor Climate-Control

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A new fashion trend has arrived, and it didn't come from Paris or a runway. It is a trend of necessity, and an unreasonable necessity at that: people wearing long sleeve shirts, heavy dress pants, and even sweaters indoors during summer. The opposite is true in the winter. People wear short sleeve shirts or roll up their sleeves indoors during the winter months. This occurs because as a society, we over-climate control our indoor environments, making things far chillier than they need to be during the summer and warmer than needed in the winter.

According to the Department of Energy (DOE), heating and cooling energy demands comprise 54% of the typical utility bill. Based on that statistic, it can be seen that if an indoor space is being over-heated or over-cooled, the results would have a costly impact on an energy bill. Inversely, utility bills can be greatly reduced by decreasing heating and cooling use. The DOE states that roughly 1% can be saved by reducing the thermometer setting 1˚F. Thus, a policy regarding lessening unnecessary climate control could help eliminate wasted energy and economic costs of over-climate controlling indoor environments.

Over-climate control is wasteful and costs in a couple ways. Energy and fuel are burnt to cool or heat beyond comfortable temperatures. Excessive infrastructure is installed to meet the demand. These two points of waste could be reduced if my new proposed policy were enacted.

I am recommending a policy of raising taxes on electricity, propane, natural gas, and other heating fuels. Taxes are a common tool for discouraging demand. The Congressional Budget Office compared a gas tax policy to the Corporate Average Fuel Economy (CAFE) standards, for example, which currently mandate that the car industry's fleet-wide average mileage must increase over the next few years. In December 2003, the Congressional Budget Office stated that, "Neither the higher tax nor higher CAFE standards would achieve full effectiveness until all existing vehicles were replaced, or after about 14 years in CBO's analysis. But over the initial 14 years, the tax would save 42 percent more gasoline than would CAFE standards with trading, while costing 27 percent less" (Congressional Budget Office, pg. iv). Taxes are preferable to a command and control policy because they generate more revenue and are easier to enforce. Taxing heating and cooling fuels is much easier than trying to get users to replace existing thermostats by only selling new thermometers.

Dr. Thornes, an expert in climate change, states in Solving Electricity Problems Without Banning Light Bulbs or Other Products that it is unfair to ban light bulbs or other products. People should be able to use whatever products they wish. However, they should be taxed more heavily on more inefficient products. Product choice can be left up to the market and what consumers can afford.

The tax would need to be steep enough to encourage people to adjust their heating and cooling habits. OSHA provides some guidelines as to what temperature ranges would still be comfortable. A table says that indoor temperatures should range between 76-82˚F during summer and 68-75 ˚F during winter. These ranges may vary based on humidity.

I am aware some people might be on a low or fixed income budget. However, that could be a large benefit to the tax, rather than a reason against it. Command and control policies achieve the same goal as a tax, but can cause less fuel or energy to be purchased, resulting in lower tax revenue. The tax revenue would help climate control habits improve. It would also generate tax revenue that could be applied towards helping low and fixed-income people purchase a better thermostat or better home insulation. Thermostat innovation might occur with more demand in the form of devices that read the temperature outside and keep the temperatures within recommended OSHA levels. Customers might demand better thermostats to help save energy and avoid the added taxes.

In summary, many people currently over climate-control indoor environments. They use more energy, pay more on heating and cooling bills than needed, and install more heating/cooling capacity than needed when season appropriate clothing could be worn. Enacting higher taxes on heating or cooling energies would save energy economically, and possibly even encourage economic purchases of smart, programmable thermostats. In my opinion, over climate controlling is a critical inefficiency that should be addressed and the introduction of higher heating and cooling taxes would be a huge step in the right direction.