

Article # 10

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Gold, Silver, Bronze, and Red Alert Standards for Specific Energy Consumption in the Manufacturing of Industrial Products: the Chameleon Approach.

Developing an effective energy rating system that is both useful to the end-user and can most effectively direct assistance to where it is most needed is challenging.

When it comes to judgment concerning the energy efficiency of a member firm of an industrial sector, there is a wrong and dangerous belief that one should be fair and just by taking into consideration irrelevant factors such as technology used, process followed, age of plant, etc. The usual outcome of this approach is to find all excuses why the firm cannot perform better.

This doesn't serve anyone, except perhaps a few egos. Certainly, it does not help the company become more competitive, and may even harm it by producing a false belief that all is okay, while others forge ahead.

Another problem arises when deciding which companies should receive aid to improve their efficiency. In the extreme, some firms will not survive competition and the changing demands of this time, no matter how much support one gives. Consequently it is best to give no support at all. There is a cruel joke among critics of energy efficiency assistance that the energy saving potential of a firm is highest by closing the firm down—100% energy saved!! A result that can be hardly beaten, but is certainly not the solution in the majority of the cases.

My favorite approach to solve both of these problems has always been to simply divide firms manufacturing the same product into four categories based on their specific energy consumption (i.e., the amount of energy to produce one unit of finished product), irrespective of size, technology, process, raw material, age, etc: gold, silver, bronze and red alert. Emphasis is on the same product and not the same technologies, age, capacity, process, etc. Otherwise we will end up arguing that if two firms show differences in performance it must be the management.

A sensible strategy based on the gold, silver, bronze, red alert classification is to stay away from the "red alert" segment, but trigger "color changing" by those in danger but not yet hopeless (a chameleon approach).

This means efforts should be undertaken to support bronze members to change color to silver and hop up to the next category. But it also means one should not spend public money to change gold to platinum, which would even further exacerbate the performance bandwidth problems of India. By performance bandwidth I mean the difference in specific energy consumption for the same product is much larger than one would expect.

There is therefore no reason for finger pointing or soul searching why certain firms are not manufacturing as energy efficient as they should. We all know it why. It has to do with technology, size, process, raw material, management attitude and age of plant. However, don't use these factors as an excuse to stay the color you are. Be like the chameleon, who changes his color to improve his odds of survival!