

Article # 31

Take a sledge hammer, destroy and discover the secrets of energy inefficiency

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Most of us have misconceptions. The most dangerous ones are those which we share hundreds of times with each other. At the end, after repeating a misconception long enough, it becomes the prevailing truth.

My personal misconception has been "that more energy efficient equipment costs more". In other words a more efficient boiler, or power plant, or air conditioner is more expensive because of the use of better material, more sophisticated design, perhaps more construction material involved. Some electric motor manufacturers proved me wrong. They manage to manufacture inefficient electric motors with higher material costs than the more efficient ones. Quite an achievement!

There are two research options at prescribing minimum efficiency standards for a range of household appliances, as well as industrial prime movers such as electric motors under the Energy Conservation Act.

- (i) Measure the motor efficiency and compare, or
- (ii) Measure the efficiency and destroy the electric motor to find out why some are more efficient than others by examining the quality and quantity of active components such as copper and steel.

In cooperation with BEE, Indian testing laboratories and the International Copper Promotion Council option (ii) was followed. The results are summarized in the [attached paper](#) by Mr. S. Ramaswamy, Senior Adviser, of the Indo-German Energy Programme.