



I've late...USA realized...every amateur heat the air...

The cave man was more clever in this

Almost everyone has heard about it, that the mankind has been in a negative spiral nowadays. The one of the main reason is the wasteful energy consumption, the consumer society greatly encourages people to do this. The global warming has been every day theme nowadays and more and more current, because the pollution and the loss heat are getting more and more increased this natural phenomenon.

There are many questions that are difficult to answer:

- Tens of thousands scientist deal with this problem nowadays as well. Why hasn't happened smashing verdict so far?
- Can reduce the environmental weighting loss heat together with the quickly growing population and industrial volume?
- Why do we finance loss making or low profit investments, instead of finance the new energy projects which can be multiple remuneratory?
- Is it possible to measure and tax the loss heat?
- Why don't deal with CO2 emissions the companies?

Approximately one million people of the population (a few thousand people) decide the most important issues of energy, types, prices and applications of energy sources.

They are the most influental people (usually politicians) with great responsibility of the states' government and budget. They are obliged to do short time (up to a few years) decisions.

It couldn't agree with them to the reduce of energy consumption, because they can't allow to reduce the revenue of energy sources. In their opinion the prices and the energy consumption have to increase permanently. It has a positive impacts on the savings, and incites to introduce the modern energetics solution. Thanks to this the users savings are increase, so the value of savings exceeds the energy prices increasing.

We couldn't have thought till today that will main progress in this case, but a few months ago, the most progressive democrat senators introduce a green draft resolution, the Green New Deal. It's worth studying this document, its purposes are the next: increase the chance of poorer american communities flexibility and job finding, reducing the impacts of climate change.

Now let's analyze (without the energy production) can we have an intervention chance of energy consumption? Are there any saving opportunities to the personal users and the companies?

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The potential solutions can be the next:

- changing of attitude
- trainings
- automation solutions
- implementation
- long time operation (saving and consumption can be checked with Kwh/hour accuracy)

These can be the best solutions in order of importance:

1. No energy consumption

First time it sounds ridiculous, but there are situations when do can be feasible! Let's look the christmas shopping attacks in the supermarkets for example. If one supermarket was measured by 1000 buyers, but if multiple buyers are in place at this time, the heating system doesn't need operating with hundreds of kw/h capacities. In many cases the markets turn on the air conditioner system to reduce the heat generated more energy consumption. An automation energetics solution can be planned for these situations. The energy saving can be 95-98% if we increase the quantity of inventillated air (in proportion to the number of visitors), and we'll heat this.

2. Significantly reduced energy consumption (80-95%)

The secret of the best solution is the attached energetic solution which can be fluid-attached heat-pump system or electricity-attached cooperative system. We can heat/make a hot water on the "hot side" and we can cool on the "cold side" of the heat pump system. It happens at the same time, so we can only pay for the heat pump's energy consumption.

3. Substantial savings (40-60%)

They are reached by modern cooling and heating solutions (surface heating and cooling). Currently the amateurs heat of few kilograms of air, altough it's better solution to heat the surfaces and blocks (walls, floors etc.) whether on industrial scale as well.

We can't forget to the reasonable quantity saving, for example if we reduce the temperature by one grade, we'll reduce our energy consumption by 5-15% as well.

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One practical example of the attached energetic solution in a hotel

There are dual problem. On the one hand the hot water needs producing to the kitchen service or bath in summer, on the other side the rooms and the restaurant are cooled by air conditioners and/or cold water of chiller machine.

On the "hot side" the gas bill and the fixed gas contingent and on the "cold side" the electricity bill and the fixed electricity contingent are paid out.

In our days this waste of money (and energy of course) can be rationalized or eliminated with many advanced energetic solutions.

Let's see the heat pump system.

We can produce the hot water on the "hot side" and at the same time the cold water on the "cold side". There are so many types of heat pumps with very different power values, but the key is not the heat pump. The main keys of the solution are the well skilled expert and the advanced automation system, because the heat pump working points, the direction system of the caloric centre and the comfort and operation status of the building must be checked continuously. The cost bearer - in this particular case the owner-operator – from his office or home can follow the saving (quasi profit) which is realized by his system with a minute updated web interface.

This is one of many opportunities. We can also mention the "energy spiral" which is operating many consumtion places. This spiral probe use the ground heat to the heat pump with primary energy source.

It's very important to understand the significant difference between the lower (10-30 kw) and the higher (>50kw) power of systems.

The lower power systems needs optimalizing for the lower cost (prime cost), in contrast the higher power systems are optimalized for saving and payback.

The companies can finance the sports and arts, but why don't they finance the energetic modernization investments to increase the comfort of the colleagues?

Why has mankind survived so far? There are so many interactive reasons for this. There are a lot of evidences from the prehistory that man used quasi geothermic energy: some ancient people painted stones with animal blood. They were taken to the cave to be better their comfort.

As is clear from the above, we can also contribute to save the mankind from the natural gas burning and its loss heat with attainable energetic solutions.

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