

## **Why do we accept up to 30% waste in various processes?**

I was at sea during 1972-1993 and during these years the great transformation took place with digitization of all the processes that went, we cut costs, loaded economically and built self-loading and self-unloading ships and we chased unnecessary hours in all processes and reduced crews. I am happy and proud to be a part of and experience this and I have benefited greatly from it in my later positions.

Now that I have worked ashore in varying positions with business development, process management and with quality systems, I can see a different pattern. We agree to lose up to 30% in the food industry, in the energy sector, in the daily work where we may not use the time in the best way.

We are now complaining that electricity prices are high and that there is a shortage of electricity. We research new products and services that we do not use. I am thinking of Energy Efficiency in all heating and cooling systems, where many systems still have the same standard setting as when it was installed and there is evidently a lot of research to save a lot on tuning the systems. The EU has invested billions in nano-research, but we do not use the new technology to reduce electricity consumption in our heating and cooling systems, neither in housing nor in industry.

## **Why one may wonder?**

A new report, GREEN LOGIC in Sweden.

This report has been produced on behalf of Swedisol, the Energy Efficiency Companies, Property owners Sweden, Innovationsföretagen, Installatörsföretagen and Swedish ventilation. The assignment was carried out by Agneta Persson, Erik Gråd and Saga Ekelin, Anthesis. They should know, one might think.

Their summary is:

The EU has climate goals to reduce greenhouse gas emissions by 55 percent by 2030. The climate goals also includes an increased share of energy from renewable energy to 32 percent, and increased energy efficiency by 32.5 percent. The established environmental goals in Sweden mean that by 2045 they will reach net zero greenhouse gas emissions. In order to achieve the goals, major adjustments and measures must be implemented. In Sweden is used in housing and services 147 TWh of energy per year (Swedish Energy Agency, 2020), which corresponds to almost 40 percent of our total energy use. There is great potential for energy efficiency in order to reduce both energy use and greenhouse gas emissions.

Great private economic profitable potential and even greater socio-economic potential.

This report shows that a gradual implementation of profitable energy efficiency renovation measures within the Swedish building stock in two scenarios, until the year 2045 respectively with a 10-year perspective. In the first scenario until the year 2045, an energy efficiency improvement would be on at least 52.9 TWh / year can be achieved, in addition to the energy efficiency of 0.5 percent per year included in the basic assumptions of the analysis. The profitable potential of 52.9 TWh / year by 2045 is divided into 41.7 TWh / year heat efficiency and 11.2 TWh / year electricity efficiency. According to our estimates, this would mean a socio-economic gain of SEK 814 billion in discounted present value. The private financial gain, where only investment costs and cost savings are taken into account, is also large. By 2045, the private financial potential is SEK 372 billion.

Here they have quantified the savings in number of TWh with concrete examples of how and where you can save. When you then hear a number of interviews about why you do not make these investments, the "market" apparently thinks, ie. we that we have done so much already.

How can we accept this, one may ask, or is it that our convenience gives us a space to waste 30% without us having to change our behaviors for that reason. Now, however, the discussion ends up whether we can afford to vacuum or wash due to this acute shortage of electricity and high electricity prices as a consequence. Unfortunately, this is not a Swedish phenomenon, but that is how it looks all over the world. The list can be made long with this huge waste of resources.

I am now looking for brave property owners and process industries in food where we have good references from France to test our Nanotechnology HTF Compact in their heating and cooling systems. You do not need to shut down the systems to install the fluid. You only replace 5% of existing liquid during operation and get an immediate energy reduction and increased efficiency in your heating and cooling systems.

For good reference examples go to <http://www.nxnano.one> and we will help you reduce your costs, reduce your CO2 emissions and best of all reduce your use of expensive electricity.

**The EU proposes a new energy efficiency target**

On 23 July, the European Commission presented a Communication on Energy Efficiency. There, a new goal for energy efficiency of 30 percent by 2030 is proposed.

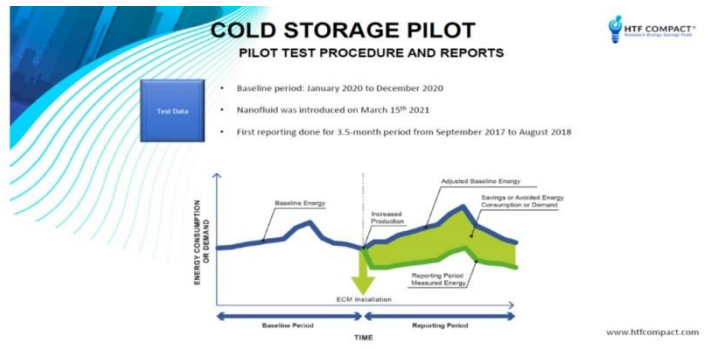
the Glasgow climate summit is over. Many important issues were on the agenda - one of them is the energy issue, which has come into focus recently. This has partly been about high prices, but also about the fact that the use of coal, oil and natural gas is increasing. Increased energy efficiency is an opportunity to reduce energy consumption.

The food industry faces major energy-saving challenges where food waste is a major problem as well as the need for large amounts of refrigeration. Here, our pilot installation in France shows great savings in terms of cooling.

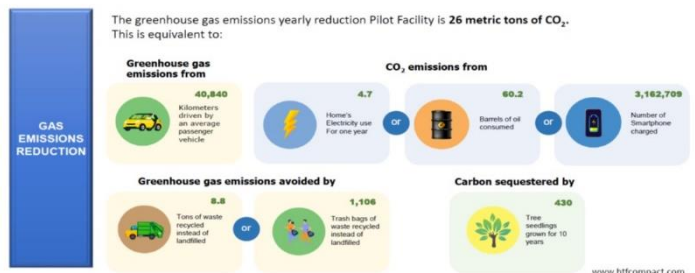
Just replacing 5% of existing liquids in Heating and Cooling Systems with Nanov liquids such as TCT HTF Compact provides savings of up to 25-30%.

Contact us to discuss how we can help.

[www.nxnano.one](http://www.nxnano.one)



**SUSTAINABILITY IMPACT**



Nils af Winklerfelt