

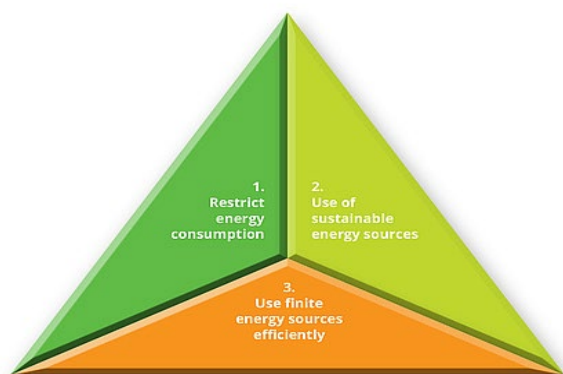
Energy savings needs to priority number one

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Energy is used everywhere in this world and we humans are consuming more and more energy each year. The current transition from non-renewable to renewable energy systems keeps getting more difficult, due to the fact that the energy that has to be free of GHG-emissions also increases. I think energy savings, or reducing energy demand, is the easiest and quickest method to reduce energy consumption and harm to the environment.













This idea about energy savings is not new, Trias Energetica is a familiar strategy to think in a sustainable way, which exists out of reducing energy demand, increasing renewable energy production and finally improve energy efficiency and where insurmountable apply fossil fuels as efficient and clean as possible.



The first step of this well-known principle is energy saving, because what you don't consume you don't have to produce. Part of the problem is that energy, especially in The Netherlands, has been too cheap for several years in my opinion. Now, with the "extremely" high energy prices, it is visible that people are struggling with paying for all their energy consumption, which makes people more careful with energy consumption. However, there are other methods that should be implemented as soon as possible to reduce the energy consumption.

Firstly, I would like the addition of a transparent easy understandable website about the energy system and the energy transition. I, as a renewable energy master student, thinks it's often hard to find information and explain what is happening to the climate to others, let alone someone who is not really interested in the energy transition. Also, in primary and secondary school there should be taught more about the challenge we are all facing at the moment to help everybody in the future with the energy transition. I think LCAs of ordinary things in life also helps understanding the impact of the things people buy/have.

Secondly, I think people also like to have more luxury and that is maybe part of innovation throughout the years. An example is students who go to school by electric scooters instead of the old fashion bicycle. Renting contracts which includes energy usage should be changed in my opinion, people should know that energy is precious and is generated somewhere. Also, I think something that is already applied in tax systems, there should be different scales for what people pay for energy and water. For the energy that we really need a discount is fine, energy should also be affordable, but when people are using unnecessarily amounts of energy and water, then they should pay more per amount of energy/water. Additionally, there are so much more relatively easy methods to save energy, like shown in the example below.

1  Turn off lights when leaving a room	2  Switch to energy efficient appliances	3  Use LED lights
4  Unplug devices when not in use	5  Keep thermostat at low temperature	6  Reduce water consumption
7  Use smart automated devices	8  Switch to double glazing	9  Cook with the lid on
10  Use a smart meter to track usage	11  Wash at a cold temperature	12  Use solar powered devices

Lastly, I would like to address the phenome "exergy", which is basically the maximum about of usable energy out of a total amount of energy. The world needs to understand this term, an example is that it is not exergetic efficient to heat houses with natural gas, because the combustion temperature of gas is way higher that the temperature that is needed to heat houses. So much more possibilities are possible, think of heat pump, which are exergetic more efficient, should be implement more.

Energy savings are the start of energy transition and everyone could and should participate. The ideas described in this paper are maybe not the most innovate, although the idea about energy tax scales for amount of energy consumption is quite new. Energy savings methods aren't innovate, they are relatively simple and effective and that is the reason why the world should focus more on this subject and should be one or the most important priority the coming years.