A NEW BALANCE FOR THE ENERGY SECTOR

NO LONGER A PUPPET IN THE HANDS OF TECHNOLOGY, PUBLIC INTERESTS AND MARKET

The European decision-making on the deregulation of the energy market was driven primarily by economic motives. Now, it is becoming increasingly clearer that the environment and security of supply are at least every bit as important. In order to formulate an integrated long-term energy and environmental policy, politicians have to set clearly defined goals which strike an even balance between the environment, the economy and security of supply – within, of course, the technological parameters of the system. But this, in turn, calls for insight into the various value chains in the electricity and heat/cold supply systems, including the interplay between them and demand-side savings options. These value chains are technological, energetic, economic and political in nature. If they are implemented on a true level playing field in Europe, both the Netherlands and the EU as a whole will be able to establish a strong position for themselves in an innovative and increasingly sustainability-based energy market. Such a vision can only be realized by a shift in focus, designed to optimally promote innovation within a context of integrated chain management.

tencvaneck@planet.nl

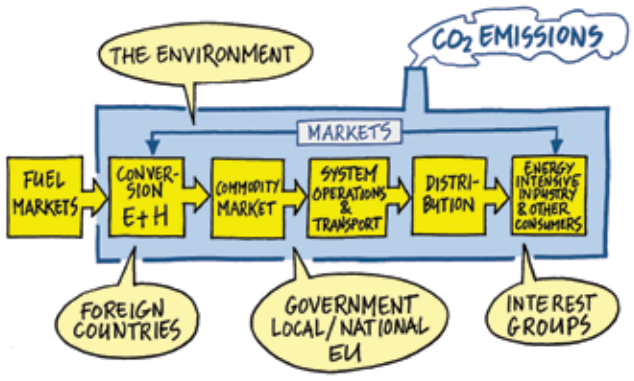
Teus van Eck

CARTOONS SUMMARY

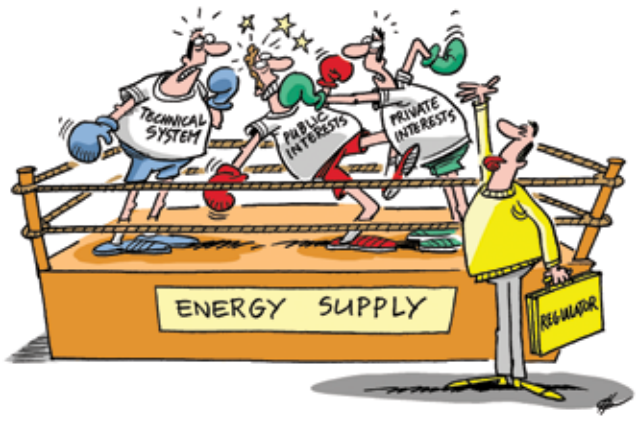
MARKET VS PUBLIC INTEREST

SAVE THE PLANET

Aim: To strike the right balance between the environment, the economy and security of supply within the boundaries of what is technologically feasible.



How to achieve it: Energy-policy goals and decisions must be based on the potential of or the implications for the entire fuel supply-conversion-transport-distribution-customer chain and include the influence of the energy/economic/political value chain.

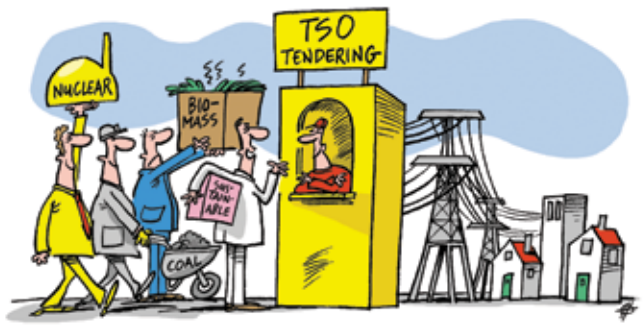


HOW DOES THIS WORK?

Tension between private and public interests: The tension between private and public interests is – like the market – seriously underestimated. Define the public interests, ensure their acceptance and embed them in a public or public-private commercial strategy. The private sector is not always synonymous with higher efficiency; it is more important to set clear aims and place accountability with the people and players who are proud of an efficient energy supply. For example, it is not a question of *either* international large-scale *or* distributed generation *or* savings but and… and… and….

IS THIS COMPETITION, AND WHERE IS THE HEAT?

Market structure: The current market structure is causing prices to flatten internationally and to edge towards the most expensive, non-subsidized alternative. The absence of a level playing field also pushes up prices and leads to soaring profits at coal-fired and nuclear plants whenever the price of gas increases.

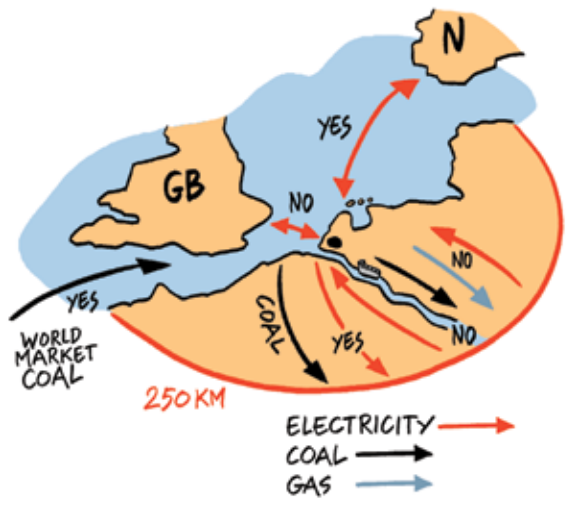


LOCAL OR INTERNATIONAL? (CUSTOMIZED SOLUTIONS)

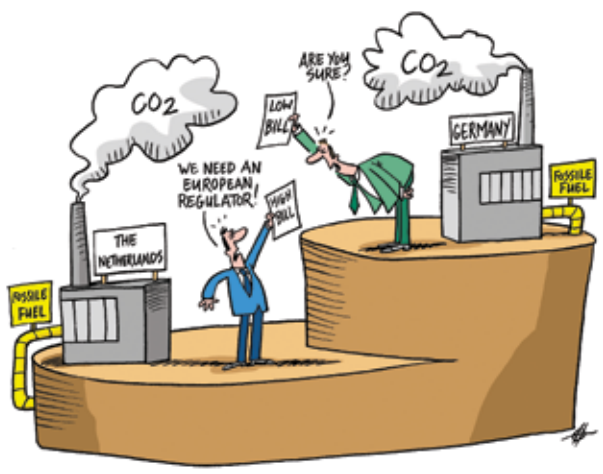
Market access: The negative effects of a market structure with dispatch per party can be addressed by centralized contracting and dispatch per region, which need not be demarcated according to national borders. This system can also be used for demonstration projects and for projects with specific (temporary) subsidies. The system should be open to every player with good initiatives.

OUR GOAL IS CREATIVENESS AND SUSTAINABILITY

Market supervision and quality: The market regulator should ensure that the technology, the environment and security of supply are tackled intelligently across the entire chain (total system management).

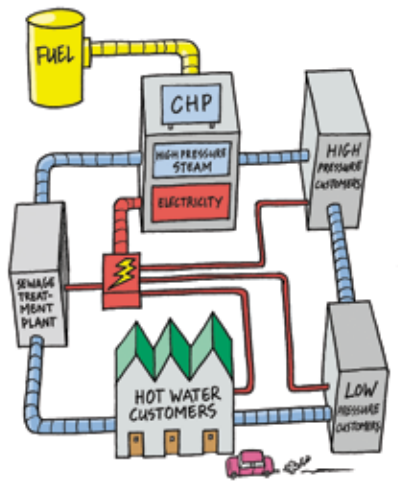


EU level playing field: The Netherlands stands to benefit from a real European level playing field and would probably become a potential exporter. The transportation of electricity across long distances can only be economically and environmentally meaningful if it comes from regions with a surplus of sustainable electricity or if it takes place between areas with an abnormal pattern of supply and demand. So, it is important to be critical when extending interconnectors and to give priority to integrated local electricity/heat/cold solutions. The opportunities which the NorNed cable offers the Netherlands and Norway are seriously hampered in the current market structure.



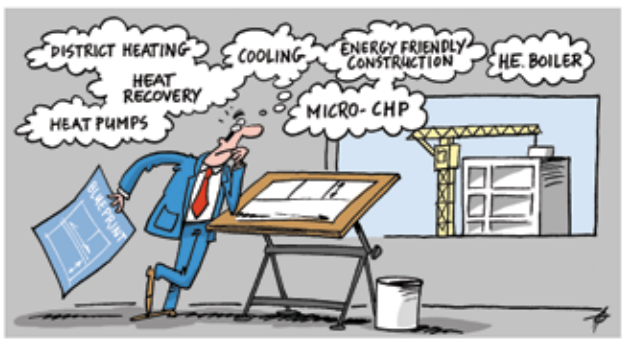
CONSEQUENCES OF NO EUROPEAN LEVEL PLAYING FIELD

CO_2 emission trade: The intention behind the CO_2 emission trade is excellent, but it is not being fulfilled in the present set-up. There is no level playing field, the system is far too complicated and the CO_2 emission trade has been turned into a financial aim in itself. Go back to the drawing board and introduce a fuel tax.

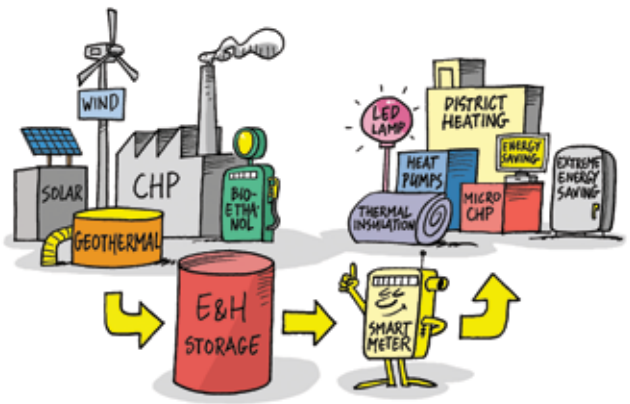


THE OPTIMAL EXERGY CHAIN

Electricity and/or heat: Too much emphasis is placed on the role of electricity in the energy supply. In the current market structure people experience the exergetic approach (linking electricity generation, industrial steam processes and the demand for heat at various temperatures) as a constraint on flexibility and an increased risk. The only way to change this situation is to implement a government policy which is geared to the utilization of residual heat, to guideline-based contracting, and to intermediators and a spatial planning system which link supply and demand.



Costs/environmental performance/innovation: The approach to actual costs, environmental performance and innovative scope of the alternatives for the generation of heat, electricity and cold, including energy savings, is too simplistic. Programs need to be set up to objectively compare all the options and their effects on the entire chain on the basis of practical cases. For example, the options for an urban environment with heat and cold requirements include high-efficiency boilers, mini/micro combined heat and power, heat pumps, district heating and electric heating. The providers usually focus exclusively on the (purported) strengths of their own solutions and the weaknesses of the competition. The knowledge needed to weigh these factors does actually exist but only to a limited extent.



THE OPPORTUNITIES ARE UNLIMITED

'Smart' meters: The 'smart' meters can only have a maximum effect in a system where management is regionally centralized and the technological opportunities for realizing savings, driving demand, disconnecting supply and demand, and data traffic are exploited to the full. Make the implementation of proven technology obligatory.

CREATIVENESS INSTEAD OF DOOM-SAYING!

Closing remarks: **Do not be deluded into believing that the Netherlands or even the EU can prevent climate change. We are nonetheless duty-bound to make maximum use of our innovative powers to build a sustainable and tolerant society which is capable of developing and applying creative solutions that enable us to survive potential disasters without having to return to a comfortless world. A new industrial revolution along these lines will have a favorable effect on the economy and launch a worldwide change in mindset and behavior.**