

PROLOOG Conference Mind the Gap! Sink holes in Twente

Welcome audience and welcome in particular the four gentlemen who will give a lecture on subjects directly related to the waste disposal produced by incinerators in the salt caverns of Twente: Mr Marius den Hertogh from AkzoNobel; Herr Wolfgang Mickley vom Institut für Gebirgsmechanik aus Leipzig; Herr Roland Weber von POP Environmental Consulting and mr Henk Zandvoort from the technical University Delft. They will introduce themselves later on.

In the archives of the Dutch government the civil registration number 024605288 is stored and linked to the name of Robert Geerts. That's my name and the attached registration number is an inexorable condition to function as a member of society. I hope all the data related to this id-number are stored properly. I can't confirm whether this is the case, because what is stored and how it is stored is beyond my control. I can only hope that the result is for the benefit of myself and other civilians and visa versa.

This unconventional introduction, I hope, has triggered your attention to be receptive to the following mind-set.

Most things in society that have direct relevance for us civilians –because they influence in one way or another our lives positively or negatively- are beyond our direct control and influence. Society can be characterized by mutual interdependent figurations of organizations of all sorts. *'So what arrangements does society need to solve the dilemma of other civilians taking decisions for the good of all?' a critical mind could ask.*

Society depends on engineers who develop technical tools which will help us to improve the results we want to obtain. A critical mind would start asking: *does this technical solution have social benefits without any down sides?*

Society depends on governmental decision makers who handle the societal dilemmas which are always connected to the large scale use of technological tools that big companies have developed. A critical mind would ask: *What's the nature of the dilemma we are talking about?*

Society depends on scientists who explore the nature of the world we live in, who explore the nature of men as a social being, etc. A critical mind would ask: *for what purpose is this all done and how will society benefit from it?* The relevance of this question is trivial but the answer is far from trivial.

When we use the words critical mind some confusion may arise. A critical mind isn't equivalent with: to be against something or to disagree. That may be the result of it but must be distinguished from it as the examples just given show.

We must be aware not to confuse a critical mind-set with an ideological mind-set. A critical mind-set is needed when we as a civilian want to acquire an unbiased understanding of matters that are of concern to us. A critical mind-set is not an capability naturally given to men. It has to be developed by education and training. This is especially true when it involves a societal problem. This Technical University of Twente, like the other two technical universities in the Netherlands, educate the student to systematically explore the technical side of a problem and to solve it by finding the right answers by raising the relevant questions.

This leads me to an important premise.

Every societal problem -now a days anyhow- has a technical side and a political side (or to use a more general expression: a β -side and an α -side). One can distinguish between them but one cannot separate them for a good result.

The use of our soil for all kinds of activities is an example of this premise by its very nature. [SLIDE 1] So the storage for a very long time of incinerator waste in salt caverns is a societal problem and therefore there are technical problems involved which need to be solved. There is a political problem to be handled. These are linked with the technical solutions engineers can create and visa versa.

How will the benefits and the burdens to realize these benefits be regulated? There are economic consequences distributed over various actors and over different time horizons.

An important question is whether engineers should restrict themselves or be restricted to the technical aspects when it comes to the question of the critical mind? I defend the opinion that the engineer should also be educated into the introductions of the social sciences and humanities to develop a proper critical mind. That's a condition to be capable of understanding one owns responsibility both as an engineer and as a member of society. This supplementary education is very use full for the engineer if not necessary how to contribute best in the discourse of arriving at societally preferred arrangements when technological developments and solutions are discussed.

Almost 50 years ago the first students of this University arrived at the campus. The curriculum of their education consisted of a unique program. The study to become an engineer at that time was programmed at five and a half years. Four and a half of which to become an engineer with a critical mind-set to create technological innovations and one year in total, distributed over those 4 ½ years, to learn about important principles and foundations of the social sciences and humanities. Things have changed now. But this conference still shows the relevance of the philosophy that an university education of engineers also needs education in the social sciences and humanities.

You are the audience and I assume you are interested in erasing your knowledge gaps by the information and facts that will be presented to you during this conference. This will contribute to independently shape your own opinion about the challenge to find a good societal solution for all the incinerator waste we produce as society. This challenge has its technical aspects intertwined with some moral aspects. That makes it a political decision problem in the first place. Our local governmental decision makers always face the dilemma to solve actual conflicts and to acknowledge potential conflicts that can emerge in the future.

The initiative of this conference has been taken by the foundation called Huize Aarde. Three gentlemen, Mr den Hartogh, Herr Minkley and Herr Weber aus Deutschland will lecture us on the engineering and scientific aspects. I am very glad we found Mr Zandvoort to be willing to lecture us on the very important aspect of the foundations how to use technology in a responsible way so it can serve for the good of society. Why I think his contribution to this symposium is important will be clear by now.

Unfortunately and although the governmental authority of Enschede supports this conference financially, it must be said that the foundation Huize Aarde could not find a councilor of Enschede willing to lecture about how the political decision maker can handle the societal dilemma associated with the storage of incinerator waste or other waste substances in salt caverns.

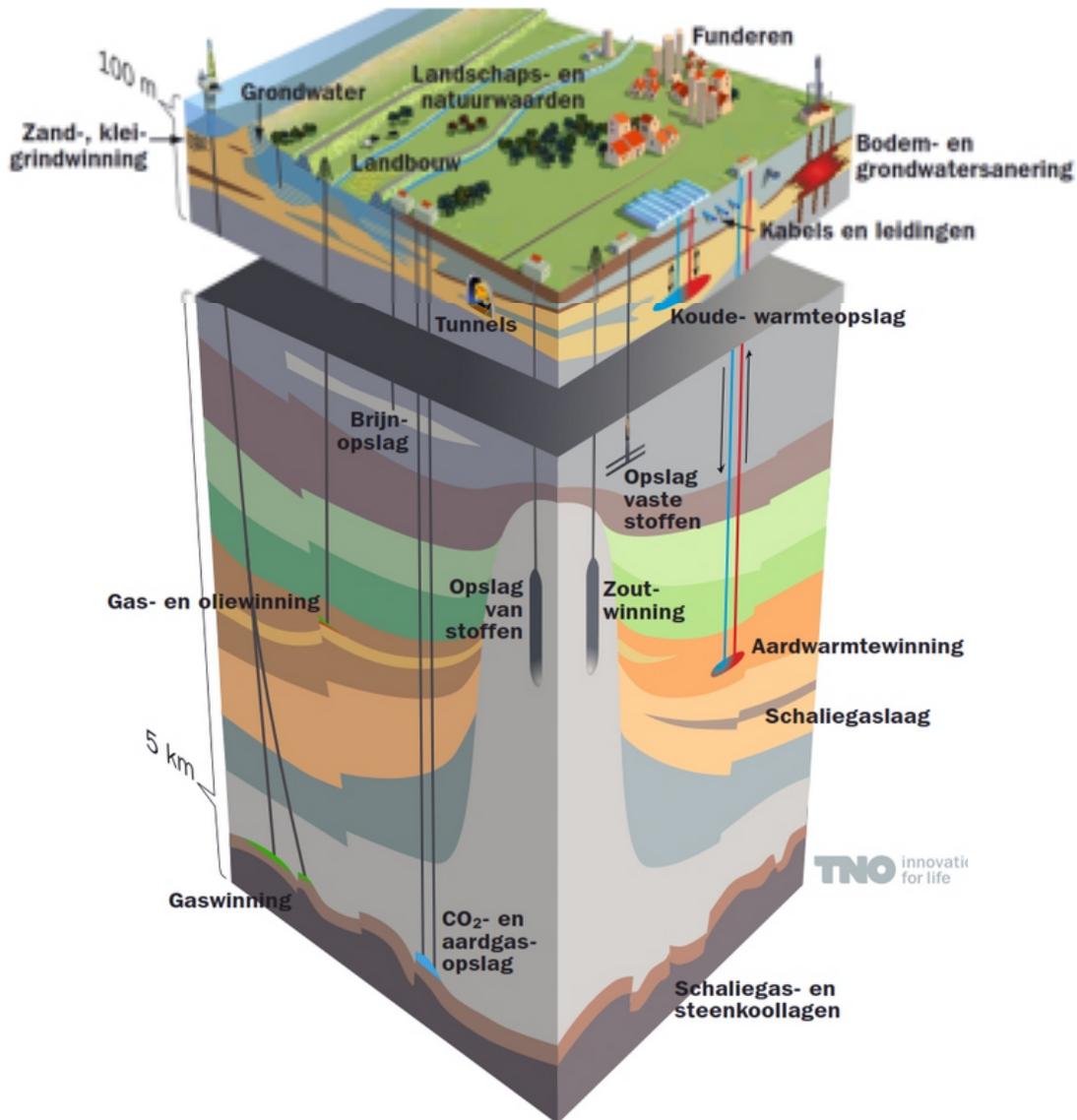
On behalf of the Royal Institute of Engineers KIVI and specific as a member of the recently founded department of Risk Governance and Technology I am happy we could contribute to the organization of this conference.

Dear audience, thank you for your attention. I wish you an inspiring conference resulting in less knowledge gaps as there are at this moment.

Ir. Robert Geerts, AVIV.nl

Overview of activities developed in the soil.

My premise: These activities should be for the good of society.
It needs a pluriform and open critical mind to help us not to drift too far away from this societal goal.



Source of picture: Structuurvisie Ondergrond, ministerie van Infrastructuur en Milieu