

Bo Ekman

Op ed published in Svenska Dagbladet (translation)

The G8 has endorsed the EU's goal that global warming shall be restricted to +2°C. In its communiqué, G8 states "the scientific view is that the increase in global average temperature must not exceed +2°C above the pre-industrial state." This elevates the EU's tactic of turning what is already inevitable, according to scientists, into a virtuous policy.

G8 and EU statements give the impression that politicians have the solution at their disposal: a 'thermostat' button to switch off that will halt global warming with precision at +2°C. This is an outdated mechanistic world-view applied to a complex, interactive system in constant flux. It is like putting a Newtonian Physicists of the old school to repair a faulty nuclear power plant.

The state of knowledge today is now so transparent that it is common knowledge that advisers to president Obama, president Barroso and Chairman Reinfeldt are aware that the +2°C -level will endanger millions of people and result in massive flows of climate refugees.

The choice of +2°C is to pragmatically adapt to reality as it came to emerge. It is not a goal that solves the problem. The G8 and EU pledge is a "concession policy" similar to British Prime Minister Neville Chamberlain's promise to the world in 1938 that he had achieved "Peace in our time", after his negotiations with Hitler in Munich. Voluntarism and goodwill will not be sufficient to motivate the nations of the world to achieve even the inadequacy of the G8 and EU targets to cut emissions by 20-30% in 2020 or 80% (OECD countries) by 2050 - or to transfer the resource needed for the poor of the world. This type of vague goals, whose realization is several generations of politicians in the future, is in practice impossible to monitor.

To date, greenhouse gas emissions guarantee a temperature increase of at least 1.6°C, perhaps as much as 2.5°C. The proposed policies on the table to date resemble fiascos. The Kyoto Protocol was just fantasy: Emissions have increased by more than 30 percent since 1990. The rate of growth increases. Increase in sea level during this century will amount to at least 1 or possibly 3 meters.

The political system has demonstrated a degree of capability to resolve intergovernmental disputes and to manage, but not to predict, financial / economic problems. However, it appears, so far, unable to solve the collisions between modern society and nature: the ongoing destabilization of the ecosystems and climate. For 10 000 years, mankind has been able to rely on nature's stability and cyclical behaviour. It is upon this security that cultures and constitutions could be built. This security, the foundation of our social fabric, is eroding.

The science is increasingly clear, with remaining disputes involving different views of how fast and how reversible the ecological change is and regarding which remedies are most effective. But there are also the deniers, such as those in Washington who represent a strong political lobby group for the fossil energy industry.

The so-called Waxman-Markey proposal for a new climate policy, which the House of Representatives in the U.S. Congress just voted through, gives according to Dr James Hansen, NASA, "as much chance of saving the climate as a V2-rocket would have had to put a man on the moon." The bill that has yet to pass the Senate is based on an emissions trading scheme similar to that which the EU introduced in 2005. This became a source of windfall profits for the largest emitters (eg SSAB) and for the energy companies (eg, E-on and Vattenfall). It has not yet had any effect on emissions of greenhouse gases.

The majority of the world's glaciers and sea ice are losing net volume. They are melting. Restablising of the Earth's climate system can only be done by reversing CO2-concentration in the atmosphere to a level where the ice stops melting, i.e. below 350 ppm. Today, the level is 387 ppm compared with the pre-industrial 280 ppm. We are now at the highest level for 600 000 years.

The consequences of this state of affairs can only be estimated but are certain to be destructive to our civilization. The manoeuvrability for risk-taking is now zero. But this is not the signal sent by the G8 and EU: Thus they set the policy tone for the Copenhagen negotiations. G8 and EU promises are based on a persistent world view in which mankind, as the jewel in creation's crown, can calculate, predict and control their own and Nature's behaviour. This is hubris. The reality of recent events in the financial markets and natural systems shows how little mankind understands or can predict. Politics and policy measures must be corrected after this fact. Cocksurenness has no place in today's complex world.

The "new" physics - quantum physics – with less than 100 years behind it – has finished off the idea of solid state and stability. It shows that matter - hence all behaviour - is in constant motion. Nature is a complex, interactive and self-regulatory system in constant adaptation to internal and external disturbances. Mankind cannot take absolute control over a system of this kind. The question becomes, therefore, if mankind is able to discipline himself to take risks that are reasonable.

For this to be done will require a change in the constitutional sense of global power structures to meet the economic, policing and military sanctions that will be required for an inexorable adaptation to the ecosystem boundary conditions ("Tipping points") that human risk taking may not exceed.

The first priority in all categories is to, in the near future, get carbon out of emissions and out of the atmosphere. Which energy mix might be profitable on a medium term perspective is a secondary issue. It would be disastrous to await the arrival of the absolute ideal energy mix. In this case, energy politics must work with pragmatism

A program must include

- The phasing out of coal by the year 2025 unless an Apollo-like global program to develop CCS technology has made coal climate safe.
- The introduction of a global carbon tax (at source) at 100 €/tonne.
- Energy efficiency programs with the objective to increase efficiency by 50%
- An Apollo-like program to develop the technology to remove carbon dioxide from the atmosphere.
- An Apollo-like program for the development of solar energy.
- Dependable investments in renewable energy sources that do not influence the global food supply.
- Restoration of degraded land, soils and forests.
- - If required for energy to replace coal and in anticipation of new, clean sources of energy: development of a new generation of nuclear power under international governance and monitoring.
- Powerful systems for decision, support, financing, and - not least - sanctions for countries that do not follow agreements to re-stabilize ecosystems and climate.

Is it politically possible? Maybe not today, but certainly in due course.