



How far can we go in manipulating the oceans to reduce CO₂ concentrations in the atmosphere?

Over the last weeks, American media have extensively reported the launch of a large-scale pilot 'eco-restoration project' aiming to manipulate the Pacific Ocean in order to enhance the phytoplankton activity and thus, the decrease of atmospheric CO₂ concentrations. Weatherbird II, the research vessel of the for-profit company "Planktos" (www.planktos.org) is currently sailing to the Galapagos Sea to seed an area larger than Puerto Rico with tonnes of iron, to stimulate the CO₂ sequestration into the deep ocean. For this private society, however, this iron fertilization experiment is a way of generating carbon offsets and benefits from the carbon trading (currently, the credit by tonne of CO₂ averages 2U\$; it varied between 2 and 35 U\$ and the market would become profitable as soon as this credit is over 5 U\$).

This experiment is based on the fact that for about 1/3 of the surface ocean the phytoplankton growth is limited by the lack of iron, which is good science based. However, it is worth to ask to which extent artificial iron fertilisation represents a real option for CO₂ mitigation. Indeed, a group of EUR-OCEANS scientists (cf. Blain et al., in Nature, April 26th), using the Kerguelen Plateau (Southern Ocean) as a site for , showed that artificial iron fertilisation of the surface ocean is 10 to 100 times less efficient in enhancing the CO₂ biological pump than iron natural fertilisation..

While the scientific community, governments, private sectors and the civil society are coming to a consensus about the anthropogenic causes of global warming it becomes urgent to think of concrete actions and to elaborate mitigation strategies to reduce atmospheric CO₂ concentrations and the greenhouse effect. So, it is crucial to examine:

How far can we go in manipulating the oceans?
What are the different options we have?

EUR-OCEANS and the AWI invite you to participate to a press conference on May 30th, at the Berlin aquarium

Wednesday, 30th. May 2007 at 6:30pm
Aquarium des Zoologischen Gartens Berlin
Budapester Straße 32, 10787 Berlin

After the presentation of a short film done for the general public by the EUR-OCEANS Outreach Team, the different options will be discussed with the scientists.