Zeppelin Manifesto on Climate Protection¹

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The policy of climate protection, with the support of influential circles within climate research, is predominantly one-sided. It is not the appropriate way to deal with the problem. Up to now, it is almost exclusively measures to do with energy, transport, industry and housekeeping that have enacted under the heading of climate protection; such as measures to save energy and to increase efficiency, and the corresponding legislative frameworks.

The threat posed to the basic living conditions of society by climatic changes cannot be combated, as it has been up to now, only by protecting the climate from society, particularly given that many of these measures are of a symbolic nature. Additional effective efforts are required on the part of researchers, politicians and economic leaders in order to come to terms with the climatic dangers that already exist today, and which will intensify in the future, even in the face of a successful climate protection policy. This protection cannot wait to be put in place only after we have lived through catastrophes in the wake of weather extremes; rather, they must be realized in the form of *precautionary* measures. And these are in short supply here and now!

Sometimes such a proposal is countered with the declaration that extending the existing climate protection policy by means of an active precautionary climate policy is essentially identical with admitting that the existing policies have miscarried. This argument is obviously short-sighted and unfounded.

Concentrating climate policy on the reduction of greenhouse gases serves no purpose, if it leads at the same time to preventing taking precautions. Such a one-sided research

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perspective and climate protection policy will neither protect the climate from society in the coming decades, nor society from the climate.

In contrast, our Zeppelin Manifesto faces up to reality and its demands:

(1) Climatic warming is not a fleeting, temporary or short-lived phenomenon. It is important to state this outright, because the impression is often given, intentionally or otherwise, that the climate can be changed in one direction or the other in a short span of time.

Lowering emissions means, in the first place, only reducing the *increase* in their concentration. And, in fact, it would already be a triumph if we were presently to reduce the increase of these emissions. The long-term prevention of global warming, however, requires a *quite extensive* reduction of greenhouse gas emissions, i.e. lowering human emissions to almost zero. The length of time necessary for our elevated concentration of CO₂ to return even approximately to its original – here: pre-industrial – equilibrium amounts to somewhere between several *decades* and a few *centuries*.

Why are these time spans relevant? On the one hand, they point up the prodigious efforts that are necessary world-wide in order effectively to halt climatic warming; on the other, these numbers are the point of departure for our further theses regarding how society will have to deal with the consequences of climatic warming.

(2) Adaptation and prevention, i.e. reduction of emissions, are reasonable options that must be pursued in concert. As a rule, however, they are different options. Adaptation to the dangers posed by the climate will only incidentally reduce emissions; likewise, energy-saving and other reductive measures will only seldom be able to reduce the vulnerability of our basic living conditions in face of the dangers posed by the climate. What both options have in common, however, is that they are promoted by means of technological innovations, but most particularly by means of social changes. A realistic assessment and a public discussion of the dangers of climate change are the first prerequisites for understanding the nature and the extent of the social changes required. A positive atmosphere, in which innovations are actively promoted and publicly acknowledged, is useful not only in the context of an active climate policy.

- (3) Reductive measures are in any case reasonable and necessary. The same is also true of adaptive measures, which continue to have a lasting effect when the reductive measures begin to work at a later point in time. The more effective the reduction, the more efficacious the adaptive measures in the long term!
- (4) Let us proceed, in a thought experiment, from the premise that human beings on this planet could manage to meet the goal of reducing emissions by eighty percent in the space of one year. When, under these conditions, would the climate machine achieve a new "equilibrium"? The answer is: not for decades. In other words, the climatic change that is already underway cannot be prevented overnight, even by the greatest imaginable efforts in the realm of mitigation policy.

A climate policy that commits itself to the problem of mitigation while neglecting the urgent need for adaptation is an irresponsible climate policy, because it denies society's inevitably higher degree of vulnerability in the coming decades. The goal of such a policy – to protect the climate from society, and thereby to protect society from itself – will bear fruit only in the distant future.

A representative example of the prevailing one-sidedness of the discussion of climate protection and efforts in this area is the often dispassionately employed term "heat deaths." As if people were almost inevitably and defencelessly victims of nature, and not victims of specific social circumstances; and indeed of social circumstances that irresponsibly put people at the mercy of extreme heat and its consequences, and do not preventively shield the segments of the population that are most severely affected. To speak of "heat deaths," as was done in the case of the hot summer of 2003, protects only the municipalities, regions or countries that failed in their duty to take precautions. The very use of this term guarantees, so to speak, that the trends that are the actual cause of this phenomenon will be thoughtlessly repeated.

(5) There are at least three important reasons why politicians, society and scientists must urgently think in terms not only of mitigation, but also of *precautionary* measures, as a reaction to the consequences of climate change:

- a. The time scales of the long-term results of lowering emissions and of climate change do not correspond to each other. Any successes in terms of reducing the emission of greenhouse gases will take effect, as we have said, only in the far future. A world in which only small amounts of CO₂ are still being emitted will come too late to limit climate change in the next decades. The practically unlimited emissions of the past and up to now guarantee that climate change will change our future living conditions. The dilemma lies in the fact that the time scales of nature are not congruent with those of political decision-making cycles in democratic societies, which proceed in terms of election periods and cycles of attention, and which are reflected in the limited horizons of human action.
- b. The threat posed by extreme climatic events, such as torrential rains, floods and heat waves, is already considerable today, and always has been in many regions of the world. One need only recall New Orleans in 2005; the storm surge of 1872 on the German Baltic coast or that of 1953 in Holland; or even Hurricane Mitch, which was turned to good use in the course of the 1992negotiations in Rio de Janeiro. The vulnerability of our basic living conditions increases parallel to the growth of the global population in endangered regions, where growing segments of the population are marginalized without protection and, not least for reasons of political economy, become victims of extreme weather events.
- c. The regions of the world whose basic living conditions will be particularly hard hit by the consequences of world-wide climatic changes are already demanding today, rightfully and increasingly vehemently, that the world must see to their protection, and not only to the protection of the climate.
- (6) World-wide climate policy, like that of Germany as well, is particularly clearly represented by the Kyoto Protocol. The Kyoto Process concerns itself almost exclusively with questions of reduction. The reduction targets of the Kyoto Protocol, which expires in 2012, will hardly be achieved. The successful execution of the Kyoto Protocol's so-called "Clean

Development Mechanism" (CDM), in terms of the world-wide emission of CO₂, would by 2012 reduce the volume of world-wide cumulative emissions by about a week's worth, compared to the same development without Kyoto reductions.

For developing and emerging countries, particularly China and India, there is currently no obligation to reduce greenhouse gas emissions. We have no precise data regarding the greenhouse gas emissions produced by these countries, but we can assume that their share of the global balance of greenhouse gases is continually *increasing*. In the future, however, the developed societies will also emit (yet) more climate-damaging greenhouse gases. The total emission of carbon dioxide above all, despite all efforts at reduction, will probably increase further in industrialized countries between now and 2012.

The Kyoto approach, as a form of socially restrictive, large-scale global planning, has failed. Any subsequent process based on this hegemonic planning mentality will serve no purpose. As a result, climate change of human origin is steadily advancing, and will step up in the future. A reversal of this alteration to our global climate will be possible only over the span of decades, if not centuries.

- (7) Despite the contrary opinions of all political parties up to now and their reluctance to speak publicly about precautionary climate programs, adaptation as a precautionary measure is relatively easy to implement and to legitimize in political terms. Moreover, it has the enormous advantage that its success will be evident in the foreseeable future. When it comes to finding solutions to a problem by means of innovations in science and technology, it is easier to present these in the form of adaptive measures.
- (8) The consequences of warming vary significantly according to region and climatic zone. Research into precautionary measures thus means expanding our knowledge about regional changes. To what, exactly, are we going to have to adapt? With the aid of adaptive strategies several goals at once can be achieved, because they are primarily locally or regionally oriented, and therefore can be flexibly configured: improving quality of life, decreasing social inequity and increasing political participation are not mutually exclusive.
- (9) The dual challenge of adaptation and prevention also leads to a reasonable division of labour. The German federal and European responsibility falls at the level of the

frameworks for managing emissions, while for those in charge of the *Länder* and municipalities, the question of reducing their vulnerability should have priority. In fact, institutions and persons charged with specific responsibilities – for coastal protection or for the Hamburg harbour, for instance – demonstrate a concrete commitment to solving problems of adaptation.

(10) In the public discussion, down to the present day, prevention alone has been portrayed as a virtuous form of behaviour, even when it takes the form of purely symbolic and largely ineffective actions, such as Sundays without driving, doing without long trips, or staging public events. This perception is not unproblematic, to the extent that it gives actors the impression that sufficient steps are being taken to protect the climate. A revision or extension of this perception to include a proactive attitude toward precautions and toward necessary social changes, however, as is essential to protect society from the changing climate and thus to reduce the vulnerability of the very basis of our existence, is still lacking. An effective defence of this basis demands precautionary measures in the coming years and decades. This must now be our priority.

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