Preface

Climate science requires global warming to be limited to 2 °C, or even less if possible, relative to the pre-industrial era, as reported both in the latest IPCC climate report of the United Nations and in other studies. The reports confirm to us once again that the increased greenhouse effect is man-made and is about 75 % due to the unchecked burning of fossil fuels.

The goal can only be achieved with rapid and radical measures in the field of energy conversion and use, which will have economic consequences that encounter political resistance. That is why there is a temptation to give up this goal in favour of easier 2.5- or 3-degree targets or to suggest that we should simply adapt.

But adaptation will be necessary in any case, even if we achieve the 2-degree target, and is neither easier nor cheaper than reducing CO_2 emissions. The reports from climate science make it clear that with a greater level of warming, adaptation is the more expensive option, to say nothing of the destruction of many ecosystems and the associated human suffering.

Compliance with the 2-degree climate target is a challenge, but not impossible. The longer we delay taking action, the more expensive and difficult it gets. We can't say better than Thomas F. Stocker: "Both delay and insufficient mitigation efforts close the door on limiting global mean warming permanently. This constitutes more than a climate change commitment: It is the fast and irreversible shrinking, and eventual disappearance, of the mitigation options with every year of increasing greenhouse gas emissions" (The Closing Door of Climate Targets, Science 339, January 2013).

The present report takes a neutral and independent point of view in attempting to show pragmatic but concrete ways to keep open the mitigation effort, overall and for all key countries.

The feasibility of the scenarios requires detail discussion and testing, both technically and politically, and the distribution of the reductions in emissions can then be adjusted accordingly. But the overall objective cannot be abandoned. If someone generates more emissions, somebody else must compensate by producing

less. This is a question of overall economic optimization that must be pursued by the efforts of local politics and achieved with the support of the global market economy (higher CO_2 price). To this end, promotion by international forums and purposeful international cooperation, both bilateral and multilateral, are imperative.

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