Climate Action: Thinking Big

Dr Günther Bachmann
Director, German Council for Sustainable Development
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Lord Mayor,
Good morning everybody!

Thank you for inviting me to address this particular audience. I congratulate all of you on being part of the UNESCO World Youth Festival. I am grateful that UNESCO has chosen the topic of climate action as the motto of this festival. It is a pleasure to see so many young people who devote their imagination to the fight against climate change. My congratulations also go to you, Mr Schuster, and to the city of Stuttgart, for hosting this event which is full of ideas, initiatives and real action, as I learnt when I saw in the hall the exhibition that you have put together. But please let me start by expressing a personal opinion:

I envy you.

It will be your privilege to see the year 2050. In 2050 today's teenagers will be in the middle of their lives. You will probably have a family of your own, you will be in the middle of your professional career, and some of you will be in your second or third job. And still, you will see the future as something yet to come. 2050 will be a magic year. My generation is talking a lot about the year 2050. You may have noticed that Mr Obama, Mrs Merkel and the other leaders of the highly industrialized countries have just decided that they will try to reduce their carbon emissions by 80 per cent by the year 2050. This really is a big story. I would very much like to see the year 2050 myself. I would like to know whether we really will achieve this goal. I would like to see whether this story will work out. In 2050, I would be 95 years old. So, of course, there is a chance for me, albeit a slender one. That is why I regard you with some envy. Look at the lighting of this room and feel the air-conditioning, and imagine a meeting room like this with 80 percent less CO_2. Think about your school, and how you travelled to Stuttgart. Can you conceive of an aviation system, our housing, and our way of life – all of our high-tech systems functioning on a carbon basis of a pretty much preindustrial scale?

That means by the year 2050:

- You will see dramatic action by all countries.

- You will see an expansion of renewable energies well beyond what today is seen as the limits of feasibility.

- You will look back on quite a substantial revolution that turned old fossil-fuel energy plants into low and zero-carbon facilities.

- You will see yourselves upgrade the energy efficiency option from today's "nice-to-have virtue" to a systemic ingredient of every kind of economic development.

- And you will expect the unexpected because the path towards a low-carbon society will surely be an adventure, full of surprising things and developments as yet unheard of.

Otherwise, if you do not see all of this, it will be hot. If you do not make all this happen by the year 2050 the planet will be very different. And it will not be a planet that is easy to live on.

Today, I have to offer two points that I think are suitable for starting your climate festival.

- The first one is: think big!

- The second one is about truth, about why truth is not so inconvenient.

When, in 1992, the international climate policies started with the signing of the UN Framework Convention on Climate Change it was one sentence in particular that was of crucial value for any following activity. It stated that *"human activities have been substantially increasing the atmospheric concentrations of greenhouse gases … and that ... the additional warming of the Earth ... may adversely affect natural ecosystems and humankind."* The key message was this: climate change has a man-made dimension, and the induced warming may overstep an effect threshold. The question is, how can we quantify the threshold and to what extent do we have to limit the emissions of greenhouse gases? Thousands of scientists have worked on this. Meanwhile, we have scientific evidence that the increase of average global temperature must not surpass 2°C. It is widely known that this translates into a maximum concentration of greenhouse gases in the atmosphere well below 450 to 500 ppm. With today's 380 ppm we therefore know that we have to take serious action urgently. Roughly speaking, there are only six years to go by which time we have to reach the "carbon peak". That alone is a tremendous challenge. But it is not the only one, and not even the most challenging one, I am afraid.

After 1992, it took climate diplomacy a whole twelve years to get a legally binding protocol (the Kyoto Protocol) to enter into force. And yet large emitters such as the United States of America and Australia did not ratify it, while other big emitters are not subject to the obligations of the Protocol, which has hardly any “teeth” and lacks a reasonable enforcement and compliance instrument. It is not surprising that global greenhouse gas emissions have increased instead of decreasing. The lesson to be learnt is that we need to step up climate policies on all levels. Politically, the planet cannot afford another Kyoto-style time delay.

We therefore need a U-turn for a world that is still moving in the wrong direction. The urgency of this U-turn becomes completely clear if we see the following three circumstances that make things even worse.

1. Not only are we not peaking carbon emissions, the emission measurements tell us that the increase is larger than predicted!

2. Since mankind started churning out clouds of greenhouse gases, the planet has warmed by 0.8 Celsius. Even if we stopped emitting right away, the planet would experience the “fat tail” of greenhouse impacts, and would warm up by another 0.5 to 2.5 Celsius, given the long warming potential of greenhouse gases.

3. We might already have passed the 2°C borderline. We have evidence that so far the impact of climate forcing is being disguised by the effects of dimming. The dimming effect is well known as a consequence of natural catastrophes such as the eruption of Mount Pinatubo. However, the contemporary dimming is man-made. What we call the Atmospheric Brown Cloud consists of soot and black carbon remnants of the burning of wood and other materials in households and industry, the bulk of it nowadays in the regions of emerging economies. The curious thing here is that at the same time as the soot disguises the temperature increase, it also has some specific characteristics that actually add to the impact of melting glaciers, for example.

We have to think big

The fact is, we are on a slippery slope. A hotter planet means the difference between life and death for more than a few people. We have to think big about how to enforce adaptation, in addition to meaningful mitigation. There is an urgent need for agreements on concrete action and implementation programs. This is the priority for international climate diplomacy in the countdown to the climate summit in Copenhagen in December 2009.

My point is, we have to think big, certainly bigger than ever before when it comes to techniques, solutions and measures.

Above all, I ask you to persistently ask “why not?” We need more room for non-mainstream thinking. Even if sometimes a new idea might appear a little bit far-fetched or may be out of touch with reality, why not air it?

I would like to give you an example. I started my career in the nineteen seventies when the throw-away society faced large waste mountains, and foam on the rivers - and even rivers that were burning because of oil pollution. We also measured lead in children’s blood that we tracked down to vehicle fuel exhaust and ubiquitous waste and the pollution of children’s playgrounds. When environmentalists suggested bringing this pollution down to zero and turning waste into resources, the mainstream political thinkers called us lunatics. They kept telling us: dream your illusions - they will never work, and get used to the fact that all industry ends up polluting the environment. That was 30 to 40 years ago. Now look at the rivers: no foam and no burning any more. Now look at the waste. We are recycling large chunks of it. Granted, nothing is perfect and there is a still lot of work to do. My point is, the recycling story is a success story, against all odds. Now look at CO_2 and draw some conclusions. As of now, nobody has a solution for recycling carbon. How carbon could be recycled is something to be figured out by your generation of engineers. But, once you start regarding CO_2 as something to recycle instead of waste, you see the world with different eyes. And you are holding a key to the future.

Let me make a remark referring to what you may have read in today’s papers and seen on TV. German industries are currently renewing the idea of deploying solar energy power plants in the desert of North Africa and transmitting concentrated solar power to Europe. It is right that we need some bright new approaches for the European energy supply. But there is also another point here: solar energy from Africa is good... for Africa. Africa has the highest demand for clean energies. Think of the water demand of the still increasing population. Fresh water is the scarce resource determining development, poverty alleviation and ecological wellbeing in this region. The broader picture of a sustainability approach is mandatory if we are to solve the political dimension of any new energy supply.

What, actually, is so inconvenient?

I guess you are all familiar with the video and the book by Al Gore: “An Inconvenient Truth: The Crisis of Global Warming”.

Yes, he is right. It is an inconvenient truth to acknowledge that there are ecological limits the planet sets for human life. This is indeed inconvenient for those who stick with the business-as-

usual approach, for those economies that are addicted to oil and fossil fuels. And for companies whose outdated fossil-based business models keep them in a locked-in position. But also for those consumers who still do not believe that their lifestyle is actually unsustainable. Inconvenient it is – if you are not prepared, if you have not adapted to modern thinking. The journal Economist recently polled more than 500 global entrepreneurs and corporate managers. Two-thirds of companies polled agree that the current economic crisis means environmental issues will drop down the agenda. A three-quarters majority thinks that too many firms use climate change merely as a marketing tool. For those companies, the serious side of climate change poses an inconvenient truth.

The current economic crisis has short waves and a high tide, and this is worrying enough. But the energy and climate crisis has long waves and comes tsunami-style. This is even more threatening. There is no simple bailout. We have to be serious and we have to remind ourselves to think big. This is truth. I ask you to ask whose truth it is. For those who are taking action, for dedicated action people who are making a difference – there is no inconvenient truth. There is simply the truth of a planet becoming hotter.

There is movement and hope, too. Cutting-edge business leaders are taking the climate message seriously and they are discovering new market opportunities for zero-carbon or low-carbon alternatives. One third of business leaders see sustainability high on their agenda in the years to come.

We need to readjust economy and society. There is a case for designing the ethics and signposts of a sustainable economy. This also translates into the daily lives of all of us. Take one example: affluence is inconvenient. Every year German taxpayers pay an additional sum of more than 15 billion euro into the public health funds for just one of the diseases of affluent society, diabetes. Wrong diet, wrong eating habits, and the wrong product design add to unhappiness and enhance climate forcing. And they add to the intergenerational financial burden. I could not agree more with what was said earlier today by Mr Schuster about the intergenerational injustice of the huge public debt of the German state.

Indeed, thinking big is both a privilege and a duty of you all. As the next generation that will have to come up with solutions and that will have to take decisions, you cannot prepare yourselves in any better way than by starting right away. We can trade fear for hope, we can trade risk for knowledge, and we can trade a wait-and-see attitude for what your festival is all about: pure, simple, dedicated and meaningful action.

I wish you all a wonderful Stuttgart festival week full of thinking big, sharing ideas, working out new action, and getting to know that there is a power of working together.

I thank you all for your attention.