

Speech

Speech by M.C.J. van Pernis

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Ladies and gentlemen,

When we were discussing my contribution to this conference, I was told that the main question I had to answer was 'What does "commitment to sustainability" mean for my company, for Siemens?'

That almost made me smile. Our company was founded in 1847 (slide 1), Siemens Netherlands has been in existence since 1879 (so exactly 125 years young), and we are still active today in the fields Werner started over a century and a half ago.

We have clustered these activities in themes, regarding a number of infrastructural activities in our society (slide 2). Be it health, energy, communication, mobility, etc.. In all of these fields we have well over a hundred years of experience, so I see that as an answer to the question 'How does Siemens deal with the matter of sustainability?'

Now, it is obvious that all of these segments entail dozens of challenges (slide 3). And then the advantages of a broadly based company such as mine become clear. Because we are involved in so many sectors of society and trained in thinking and working interdisciplinary, we can offer hundreds of different ideas, answers and solutions (slide 4). I think most of you will agree that when we talk about sustainable mobility, we can only find the solution in an interdisciplinary approach. My colleague from Shell, Rein Willems, has already made that clear.

His plea for a significant intensification of Public Private Partnerships was close to my heart.

As stressed several times already during this conference, we face enormous challenges in this new century. I use the word 'challenges' because I am an optimist and I believe in potential solutions. But at the same time I do realise that my optimism is not shared by all of you, and that some of you prefer to use the word "problems". I do believe however that if we start acting here and now, there is still reason for optimism.

Challenges then; but challenges, that neither Shell nor Siemens can meet alone. And, let me make myself clear, governments can't do it alone either. In short: in Siemens we have opted for an interdisciplinary approach. In addition, businesses must cooperate with one another, and last but not least, government and businesses must join forces. For too long the search has been for partial solutions. And for much too long we haven't wanted to recognise the unstoppable growth of mobility.

Mobility in every sense has acquired enormous significance in our society. It enables individuals, businesses and nations to be internationally active in real time all the time as never before.

Over the last 50 years the long-term trend to urbanisation has substantially increased. Already today almost 50 percent of the world's population live in urban areas. This proportion is estimated to rise to 60 percent in the year 2020; in Europe it is already 75 percent. Within the same period, urban traffic and transport requirements are expected to increase worldwide by more than 50 percent. The special relationship between transport and economic growth is often poorly understood or

underestimated. Mobility is the key factor in our financial and social development.

Last week, you could read in the Dutch press (slide 5) that the urbanised centre of Holland, called 'the randstad', together with the 'Ruhrgebiet', is one of the most polluted areas in the world as far as NO₂ is concerned. Every year about 5000 people die because of polluted air in the Netherlands alone. This pollution is mainly caused by car traffic, and it is obvious that the main problem is found in the vicinity of major roads and not only by driving cars but also by the thousands of standing cars in the daily traffic jams. Again, one of the challenges I was talking about.

To prepare ourselves for a future in which existing energy sources are under pressure, yet the need for mobility is constantly increasing, it is no longer enough just to extrapolate existing developments. In our Research & Development program, Siemens has opted for a two-path approach. Firstly, the extrapolation already mentioned, in which existing technologies are projected into the future. Secondly what is known as Retro-polation, which involves drawing up future scenarios and then deriving consequences from them. These are two opposing perspectives. Extrapolation shows us the way from the present into the future, while with retro-polation we look back from the future into the present. This technique has brought us many fascinating ideas already.

At this point I'd like to show you one of our 'Pictures of the future' (slide 6). Three main components are distinguished here. These are the components we use in Siemens to draw attention to future developments in the field of mobility. I'll list them, and then mention the main developments in each component.

Given the limited time, I can't do this in full and I certainly don't have the time to explain these developments comprehensively. This morning will just be a reconnaissance.

Although we can distinguish several aspects in this picture of the future, I want to refrain myself in this short speech to the three most important ones:

- Road traffic
- Rail transport
- Traffic infrastructure

So let's have a closer look to each of these components.

Road traffic

First of all, again I agree with Rein Willems. We will have to further develop alternative types of propulsion with hydrogen engines and fuel cells. On top of that we must work on the effectiveness of turning energy into motion. The existing petrol engine can still be considerably more effective with the use of electronics. Again, for an optimum of results, Shell, Siemens and the car-industry must work closely together. And we do, ladies and gentlemen, we do!

Of course we must use light weight, environmentally friendly materials and in our cars of the near future all IT-related services must be integrated in order to create a higher level of information to support driver assistance systems.

Very important for the smoother flow of road traffic are the developments Siemens has made with on-board data communication platforms.

These communication platforms form the interface to Intelligent Transportation Systems that enables the provision of dynamic information to drivers (for instance regarding traffic signs or warnings in the car about traffic congestion).

Rail transport

In the Netherlands and indeed in Germany too, I've never made a secret of the fact that I'm a great supporter of the Transrapid, a magnetic levitation train for fast, regional and national passenger transport. It is an addition to the existing means of mass transit with combines high speed with fast acceleration which makes maglev to an unique combination of metro and high speed train.

It is clear that public transport can help a great deal in bringing down the NO₂ problem I just mentioned. Just imagine going from here, from Amsterdam to Groningen, within one hour, including 6 or 7 stops. Or going from here to Prague, within 2.5 hours, without the consumption of thousands of gallons of Kerosene by airplanes.

We all know that the Chinese government has decided in favour of the Transrapid. I dare say that the problems we face in Europe, as far as mobility and pollution are concerned, certainly are not smaller than in Shanghai or Beijing.

That brings me to the same point Rein Willems mentioned. We can use alternative fuels to create energy for our trains. In this field we must take firm action quickly. We must build the alternative power plants and we must have the courage to take decisions on alternatives for the

conventional trains. There again our retrospective approach has been a great help.

We will continue working on the further development of wind and solar energy, and also of bio-mass power plants. We even have far developed plans for the use of a chicken-litter power plant.

But having built the last nuclear power plant still in use in this country, Borssele, I can not help pleading for the use of more nuclear power. Huge developments are made in this industry and it is clear that nowadays there is a far greater acceptance within the general public for this form of energy.

Traffic infrastructure

I will be short here. First of all I'm convinced that we can use our existing infra-structure a lot better. As I already said we must stimulate a far better flow of road-traffic. There are many ideas already worked out in this field, that only require a quick decision. The techniques are there, governments must have the courage to take action.

Regarding this I like to mention the Infrastructural systems to support collision avoidance we developed. And of course the advanced planning and control systems for Traffic management. Again, in this short time I can only mention them, not explain them. As far as infrastructures are concerned I want to stress one more point. I'm convinced that Europe in general and in the Netherlands in particular have a fantastic network of waterways. We do not use that to the full yet. May I urge my own government first of all to be creative here and develop complementary

plans to improve the use of an infrastructure the Dutch are so familiar with?

Mr. Chairman, ladies and gentlemen,

Ten minutes only to sum up all the ideas Siemens has in the field of mobility is a bit short. Ten hours would have been a lot better.

Nevertheless I hope I managed to give you a modest impression of all challenges and their solutions we have been thinking about within my company.

I would like to end my speech repeating my plea for cooperation between companies, between nations and between companies and nations. I am, as I said, an optimist, who sees many fascinating challenges ahead of him. At the same time I am very well aware of the time pressure. If we wait too long, these fascinating challenges might turn into unsolvable problems after all. All of us here, you and I, have the responsibility to avoid that. Siemens is ready to face these challenges. I gladly invite you to join us.

Thank you.