

Greetings, NRW Government

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Greetings, NRW Government

Dr. Jürgen Rüttgers, then Minister President of the State of North Rhine-Westphalia, Germany

Not long ago I was in Abu Dhabi where I had the opportunity of looking at the plans drawn up by Sir Norman Foster for the environmentally friendly Masdar City. A fascinating vision. The city will manage without cars. There will be no greenhouse gas emissions. There will be no need for refuse dumps. The city will produce its own electricity. And it will do without fossil fuels. This is the vision of an ideal city of the 21st century.

Whether it is feasible remains to be seen. What is important is that we actually have this vision. This vision means we are entering a new era. In the industrial era that is now coming to an end, industry and environmental protection were diametrically opposed. In the new industrial era that is now beginning, they will be two sides of the same coin. The great innovations of the 21st century are to be found in connecting the two. This is the next big innovation cycle for growth, prosperity and jobs.

Here in North Rhine-Westphalia, we intend to be pioneers blazing a trail into the new era

Here in North Rhine-Westphalia, we intend to be pioneers blazing a trail into this new era. We are an industrial region. And we intend to remain an industrial region. But we want to become the most eco-conscious industrial region in Europe. This is not only decisive for the battle against climate change. It is above all where the great innovations of the 21st century are to be found, which will create innovations and jobs.

Specifically, this firstly means that production must become more climate-friendly and efficient. This is true of all branches of industry, but particularly of energy. This means that old coal-fired power plants will have to be shut down as fast as possible. And no new ones will be approved unless they significantly reduce their CO₂ emissions and improve their energy efficiency.

We must use our resources more efficiently. Raw materials are by far the greatest cost factor in manufacturing industry today, accounting for about 40% of costs. Scientists say that we could save 20% of raw materials consumed by improving efficiency – by recycling and by developing new materials. However, this also means that access to raw materials must be safeguarded. I have therefore long been in favour of an integrated concept for raw materials.

This means that, together with the EU, Germany must ensure that conditions for fair competition are enforced in the G8 and G20 groups and that raw material monopolies are effectively counteracted. The Federal Government must promote its own concepts as well as research and development for new metals and the recycling of rare materials. And industry must play its part by establishing strategic alliances and new technologies for the effective recycling of raw materials in the future.

We are developing a second, decentralized energy path

Secondly: We must expand the use of renewable energy sources by means of a second decentralized energy path. Decentralization is the key to the energy of the future. This involves renewable energy sources in our own backyard, where we live and work. This is why we are encouraging solar and wind energy, combined generation of heat and power, geothermal heat and bioenergy – in order to save CO₂, so that we are not dependent on oil and gas and the whims of the energy multinationals.

Here is just one example. By 2020, here in North Rhine-Westphalia we intend to double the amount of energy produced from biomass to almost 18 billion kilowatt hours. We will then be able to cover 20% of the electricity requirements and 10% of the heat requirements of our private households.

We must invest in modern environmental technologies

And also a third point: We must invest in modern technologies that create growth and at the same time conserve resources – for example in fuel cell and hydrogen technology. This offers great economic opportunities. Alone with the hydrogen produced by our industry we would be able to operate about 260 000 cars and almost 6 000 buses. And we wouldn't have to produce even one additional molecule of hydrogen. We want to exploit this opportunity.

For our lighthouse project "NRW Hydrogen HyWay", we in North Rhine-Westphalia are providing €200 million together with the Federal Government, the EU and industry: for our infrastructure, our fleets of vehicles and for stationary plants.

We also intend to produce hydrogen from renewable sources in future. Special projects are already in progress: with sewage gas in Bottrop, with algae in Bochum and Bielefeld, and solar energy in Jülich. And we also have the necessary infrastructure. A 240-kilometre hydrogen pipeline already runs from Leverkusen to the east of the Ruhr region. I am very interested in hearing what paths the conference will propose today for the future.

However, it is not only the opportunities for hydrogen that are fascinating but also those offered by CO₂. It is, after all, not only important to save CO₂ but also to obtain new products from CO₂ in order, for example, to convert carbon dioxide into biomass using microorganisms or directly into useful materials. We are expecting great innovations here. There is no sense in simply storing CO₂ underground. This is why, together with industry, we want to establish a national CO₂ research institute.

Even today, North Rhine-Westphalia is already one of the most important locations in the world for modern environmental engineering with more than 250 000 people employed in the environmental industry and a turnover of about €45 billion. We want this to grow even further.

Example of electromobility

Let me just give one last example of innovative environmental technology that I find particularly fascinating. I am speaking of electromobility. We want to make North Rhine-Westphalia the first large-scale model region for electric cars in Europe. By 2020, we want to have 250 000 electric cars on the road. We are making €60 million available to promote research and development. We are constructing electric cars and a network of charging

stations. And we are developing new high-performance batteries so that these cars can be driven all round the country.

And this shows just how important impulses from politics are for the development of such technologies. It was quite right that in the USA President Obama insisted that pollutant emissions from new vehicles have to be reduced by 30% by the year 2016. It was also quite right that the EU decided that from 2021 no new building may consume more energy than it produces. These are as yet the most stringent standards in the world. But such standards are indispensable.

The Innovation City project is unique in Europe

If we combine all these innovations then we can also break new ground in urban development. Together with the "Initiativkreis Ruhr", an association of 61 German and international companies, I recently gave the go-ahead for an *Innovation City* in the Ruhr region: for a neighbourhood with about 50 000 inhabitants, which will set a new trend for an environmentally conscious lifestyle and energy-efficient industry. Not on a green field but right in the centre of town. Together with local citizens. Urban renewal combining high tech with the needs of the citizens makes this project unique in Europe.

The future belongs to environmentally aware industrial regions – such as North Rhine-Westphalia. We will be successful if everyone plays their part. Gandhi once said "You must be the change you want to see in the world." This should be our motto – not only for us here today in Essen but also throughout the world. I wish you every success with your conference.