”Water Pricing and Innovation”

Slide 1: Presentation + intro remarks

Ladies and Gentlemen, thank you for the invitation.

It’s a pleasure to be here.

My name is Jørgen Bjelskou. I am the Group Public Affairs Director of Grundfos.

I perceive my role today as the voice of the private sector and the voice of the solution providers.

During the next ten minutes I am going to tell you about my understanding of water pricing and give you a few examples of concrete solutions and technologies that are able to penetrate the market if the water price gives the market the incentives to make the right choices.

My main message today is basically that solutions and technologies already exist. And – secondly – that the adequate water prices will give the private sector – the technology providers – an incentive to drive the innovation forward.

It is really not very complicated.

Slide 2 Presentation of the Grundfos Group

Firstly, however, allow me – very briefly – to introduce the Grundfos Group and our activities in China.

Grundfos is a global leader in advanced pump solutions and we are a trendsetter in water technology.

We have an annual production of more than 16 million pump units and an annual turnover of more than 23 billion Renminbi.

We have around 19 thousand employees located in more than 56 countries.

Our main business areas are:

1) *Buildings* – all kinds of buildings like family houses and commercial building like shopping males, sport arenas etc.

2) *Industrial pump solutions* – all kinds of different industries like the food and beverage industry

3) *Water Utility solutions* – water intake, water distribution and waste water.

Slide 3: Presentation of Grundfos China

Now, a few words about our activities in China:

We established our company in China as early as 1994 - based in Shanghai. We have factory in Suzhou and a factory in Wuxi. The total investment here exceeds 100 million Renminbi.

Today, we employ – all together – more than 1.600 employees in China and we perceive China as our second home market.

But Grundfos China is not about production and sales only. We have the whole value chain represented, including support functions such as marketing, public affairs and a major R&D facility in Sozhou.

Grundfos is proud to be a leading pump supplier to China's government agencies and a supplier for world-famous iconic projects in Chine. Let me give you a few examples:

- The Great Hall of the People,
- The National Stadium – the so-called Bird's Nest,
- The National Aquatics Center – the so-called Water Cube

Obviously, we are happy and very proud to be part of such distinguished project.

Slide 4: The Grundfos understanding of water pricing

Now, let me turn to the question of water pricing and our perspective on the interplay between water pricing as a policy tool and the use of water saving solutions and technologies.

Grundfos believes that there should be a better balance between water supply and demand in the future.

Without adequate drivers and policy frameworks such as water efficiency targets and not least water pricing – giving the consumers an incentive to make the right choices – we will not be able to reach our common goals.

With regard to the *exact* pricing we believe that:

1) There is not a "one size fits all" – the price must reflect the very different circumstances in different regions. For instance, pricing must reflect different externalities and the true value of water taking into account future scarcity.

2) Secondly, we believe in the so- called "polluter pays principle". For instance, it does not really intelligent to increase the water prices for end-users if the water is in the distribution systems operated by the utilities. I will come back to that in a minute.

3) Thirdly, we believe that water must be affordable for everybody should have access to affordable, clean water. We basically believe that access to water is a human right.

Having said all this, we do believe in using the cost of water as an incentive to change consumer behavior.

The fact of the matter is that the higher cost of water, the better business case for using existing water saving solutions – and for future water saving solutions and the more innovation will be promoted in the private sector.

Now, let me give you two concrete examples of the first thing mentioned – examples of solutions and technologies that already exist and will be economically much more attractive to implement if the water prices reflect the true cost of water.

Slide 5: Demand Driven Distribution (Example 1)

Much too much water is lost in the distribution system. In many metropolitan cities around the world more than 40 percent of the water is lost through the distribution system. This goes for many European and Chinese cities.

There are many solutions to this challenge. One of the challenges is to regulate the pump pressure according to the needed demand. Obviously, the demand is higher during the day time than during the night. By regulating the pressure we can minimize the loss when the demand is low – actually not only the loss of water but also the loss of energy.

It goes beyond saying that the price of water and the price of energy play a key role here. If the penalty of the so-called non-revenue-water and the price of energy are high, the utilities will have a significant incentive to reduce the loss. If, on the other hand, the utilities can lose the water without a penalty and the energy cost is low, the incentive will also be lower.

At the same time, this example illustrates the complexity of the pricing discussion. Because here, it is not necessarily the way forward to increase the water price paid by the end-users (the households and the companies). But the business case of reducing the loss will definitely improve if the utilities do have an economic incentive to reduce the loss.

The technologies and the solutions are there for sure.

Slide 6: Re-use of water (Example 2)

Another example is about the re-use of water.

Here, the industry provides many different solutions for water treatment and water reuse for secondary purposes such as car wash toilet flushing and even irrigation purposes.

However, many of the existing solutions are quite costly and therefore not economically viable with very low water prices.

Let me give you a very specific example:

The so-called Bio-booster system – from my company – is a membrane technology that is able to treat the waste water from industrial processes, for instance food and beverage facilities. The water can be reuse for secondary purposes.

It's a proven technology – but in most countries the return of investment is too long, often more than five or even ten years.

This is – not least – because of the fact that it is simply too cheap for the industry to use clean water – in some countries even drinking water quality – for the secondary purposes.

Here, it is our belief that a true break-through of the existing technologies in the market place is very closely related to the water pricing: The higher the cost of water in the industry sector, the more use of existing water reuse technologies.

Slide 7: Summing up and perspectives

Ladies and gentlemen, allow me to sum up:

Firstly, technologies exist – but penetration of the solutions in the market place is very dependent on the price of water.

In the market place, it is all about the business case and return of investments. The higher the price of water and the more economic incentives for the market players, the better business case, the shorter return of investment etc.

Secondly, we must never forget that innovation will only happen, if the long term economic incentive is there. Please never forget that private companies look for future market opportunities for future solutions. In other words, the higher the water price, the more innovation.

Thirdly - if introduced properly – the pricing of water will reduce water scarcity. But it will do more than that. It will also reduce energy consumption. The reason for this is simple: Every time a drop of water is being consumed, the pumping stations of the distribution system will use energy resources and – later on – we need to use energy to pump the waste water to the water treatment plants and into the oceans.

Therefore: The less water we use, the less energy we use.

Thank you for the attention!