



Dr. Hans-Peter Sollinger, Member of the Management Board Voith AG and President of Voith Paper.

*“We can reduce
the use of resources”*

Interview with Dr. Hans-Peter Sollinger on the topic of ‘Green Technology’.

Many industries are now interested in sustainability and energy savings due to rising energy costs and new legal requirements. These terms are now being used in an almost inflated sense. For Voith Paper, Green Technology means economically and ecologically sensible paper production. In this interview, Dr. Hans-Peter Sollinger explains exactly what lies behind it.

twogether: Everybody is talking about sustainability. Is green technology a fad, with Voith Paper jumping on the current sustainability bandwagon?

Dr. Sollinger: Voith Paper is not a company that is oriented to fashion trends. Rather, we have always seen ourselves as technological pioneers in our industry. Likewise with the topic of sustainability. This term involves not only environmental questions, but also social and economic goals. In this respect, we at Voith Paper have had a sustainable orientation for many years – even if it wasn't previously called that. Already in the 1950s, Voith Paper developed applications for producing paper grades from recovered paper.

Much has happened since then, but we always kept up the development of environmentally friendly and efficient products. Our research and development team had designed energy-saving machines long before the sudden and dramatic increase in energy prices.

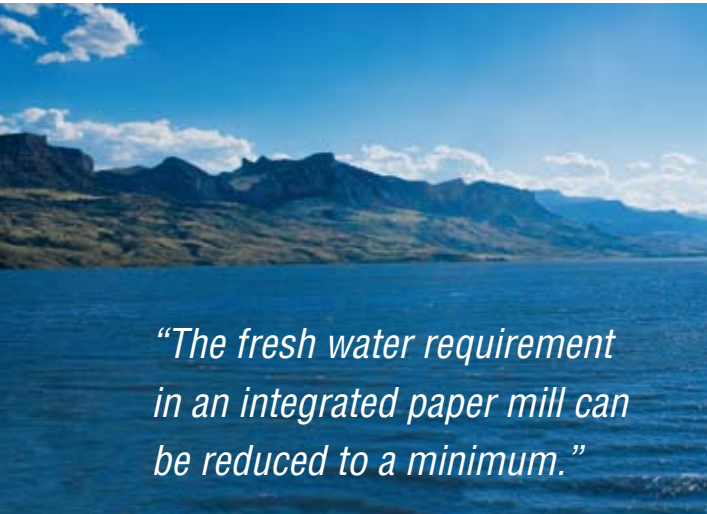
twogether: Environmentally friendly products – that sounds like a luxury, which the paper industry can't afford in the current economic situation.

Dr. Sollinger: That is exactly the wrong approach. It's about the compatibility of economy and ecology here. That is what Green Technology means to us. We can significantly reduce the use of resources in paper manufacturing – and thus save our

customers cash. The costs for energy, pulp and water are on average over 70% of production costs for most paper grades. Products and processes that achieve improvements in these areas not only relieve the environment but also our customers. That makes Green Technology all the more important. There is already a high portion of recovered paper used for packaging paper today. But even for graphic paper, a trend toward using more recovered paper is already in full swing. We have paper machines in use with various customers that produce both high-quality newsprint and copy paper as well as high-quality tissue paper with a very high portion of recovered paper fiber. Thanks to our technology, their fiber costs are dropping significantly. At Steinbeis Temming in

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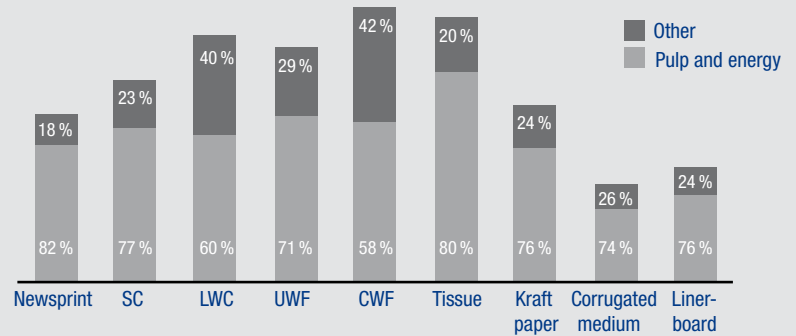




“The fresh water requirement in an integrated paper mill can be reduced to a minimum.”

Average production costs worldwide*

Manufacturing costs per ton of paper produced (without capital costs)



*at machine level

Source: Fisher Database

The costs for energy, pulp and water are generally over 70% of the production costs for most paper grades.

Glückstadt, for example, the use of pulp was reduced and thus also their energy consumption. This corresponds to a saving of several million € per year. The higher investment costs for a recycling system pay for themselves very quickly in comparison to a fresh fiber preparation system.

twogether: Is Green Technology therefore a new strategic approach?

Dr. Sollinger: Yes, because with Green Technology we sharpen our orientation to environmentally friendly technologies. Our focus is on new products and systems that show an ecological improvement over preceding models and at the same time have clear economic advantages. These improvements must involve at least one of our main areas, that is, fiber, water, energy or residual materials. We concentrate on three components. Voith Paper wants to contribute to the maximization of the global recovered paper rate in paper production. In addition, we want to cut primary energy consumption in

half over the entire paper chain, seen globally, and significantly reduce fresh water consumption. In view of the current numbers, we can certainly still achieve a lot here – after all, globally the paper industry currently requires on average 20,000 liters of fresh water and up to 3,000 kWh of power to produce 1 ton of paper.

twogether: So are we getting a bit closer to the vision of the integrated paper mill?

Dr. Sollinger: Only the integrated paper mill allows optimal resource-conservation and environmentally friendly paper manufacturing. This means, for example, that we preferably use recovered paper as pulp with the aim of reducing the amount of fresh pulp to such an extent that wood, a valuable resource, can be used more ideally and more efficiently in the paper lifecycle and sustainable forestry. This is especially true in view of the fact that China and India, with more than 2 billion people, will continue to develop in the future and also

consume more paper and packaging. Of course, you can't completely do without using fresh fiber, since recovered paper can't be reused to an unlimited extent, i.e., fresh fiber and recovered paper need one another. In addition, the fresh water requirement in an integrated paper mill can be reduced to a minimum, as effective preparation means the process water can be run in a closed loop. Moreover, comprehensive energy management within the plant gives a noticeable reduction of primary energy. In addition, we can use a large part of the waste for energy recovery and generate bio-energy. Some Voith Paper innovations have already brought us much closer to these goals. Now it's a matter of continuing to pursue the vision of the integrated paper mill with the Green Technology strategy and sustainably, ensuring economic success for ourselves and our customers.

twogether: Many thanks for the interview.