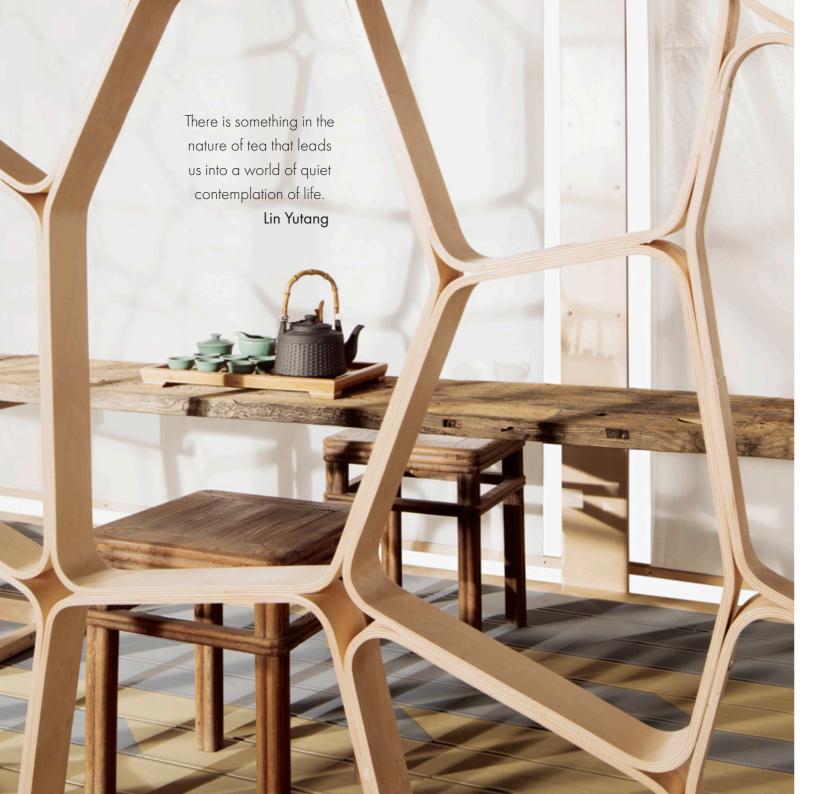


THE BIOFORE TEA HOUSE





FOREWORD

Chinese tea house takes new form with Biofore



UPM integrates bio and forest industries to build a sustainable future with innovative solutions based on renewable forest biomass.

Our Biofore thinking has deep roots in our heritage while reaching out far into the future.

A rich cultural heritage meets visionary thinking also in the Biofore Tea House. The traditional Chinese tea house, dating back thousands of years, was the perfect inspiration and starting point for the journey described in this brochure.

A team of design students from the Tongji University College of Design and Innovation were asked to redefine the design of a traditional Chinese tea house. The aim was to come up with a highly aesthetic and harmonious, yet modern and functional conceptby using UPM's innovative woodbased biomaterials.

The team of six highly skilled design students explored the many aspects of the Chinese tea culture, UPM's Biofore thinking and innovative wood-based biomaterials to come up with a symbol for Biofore in China – The Biofore Tea House.

I would like to thank professor Chen Yongqun and Ms. Mo Jiao of Tongji University, and the talented members of the design team: Shen Jingliang, Li Yunpeng, Tang Shitao, Wang Mengting, Zhang Yiding and Ye Weijun, for their magnificent work.

The Biofore Tea House is more than a beautifully designed space. It has real character and spirit. Welcome to the Biofore Tea House!

Elisa Nilsson

Vice President, Brand and Communications, UPM



A taste of Chinese tea history

The tea house has been used for generations for sharing ideas. The ritual of preparing and serving tea immersed in debate and lively discussion has always been important.

In the Chinese tea house every person and idea is valuable and respected.

Tea is rooted in Chinese culture

Tea is woven into the history and culture of China. This is visible in the numerous poems, calligraphy works, paintings and pieces of literature eulogizing tea. First enjoyed as a herbal medicine over 2.600 years ago in the

Yunnan province, tea is now enjoyed throughout the day – every day – and is considered one of the so called seven necessities of Chinese life.

Combining usability and meaningfulness

For thousands of years, tea ware have had an important role in the tradition of Chinese handicraft. The changing of the materials used for making ceramic tea ware was closely related to the development of firing craft and kiln factories: from the crude pottery in the early period to the exquisite ceramics in the later.

One thing, however, remained immutable:
The design of the tea ware always aimed for
both usability and meaningfulness, not only
aesthetics. Being different without a meaningful
idea behind it was and is not enough.

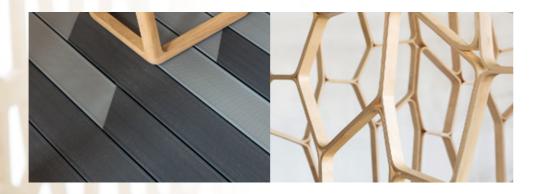


Biofore – rooted in heritage, driven by innovation

Biofore is a word that pays tribute to UPM's heritage and inspires us to create a more sustainable future. We are driven by commitment to finding solutions that are sustainable and address the many global challenges the world is facing.

The wood fibres growing in the forest are the perfect ingredient for innovative biomaterials which can be used to replace non-renewable materials in countless enduses.

The Biofore Tea House celebrates the immense design opportunities offered by wood and biomaterials. Moreover, it salutes the international teamwork to create something new drawing from the long traditions of the Chinese tea culture.



Sustainability is the main task of innovation

"At Tongji University's College of Design and Innovation sustainability is



"In China, one of the most important traditions is the harmony of nature and human being (天人合一). This old wisdom is true and correct also in the modern times.

Respecting the nature in order to improve people's lives is the core of UPM's Biofore thinking. It matches well the Chinese philosophy of life."

Lecturer MO Jiao, Tongji University College of Design and Innovation

Sustainability is one of the most important issues

"My future as a designer will be characterized by the fact that sustainability is already now one of the important issues in the modern world. As a design student it has been very rewarding for me to learn about UPM's Biofore thinking and strategy regarding ecofriendly operations and products. Green thinking and sustainability are becoming more and more important everywhere all the time."

Designer SHEN Jingliang



The Biofore Tea House celebrates the immense design opportunities offered by biomaterials.

"We decided to use WISA plywood for the roof of the tea house. It's a very workable and clean material that doesn't produce dust when cutting it compared to other materials I've tested earlier. UPM Grada is an impressive material as it enabled very elegant and light-looking structures that could carry a lot of weight. Moreover, the bended design looks very elegant allowing exactly the kind of sophisticated design we were aiming for." Designer SHEN Jingliang

UPM's biomaterials give creative freedom for design



One of the main design criteria for the Biofore Tea House was to come up with a modular design that allows flexibility and mobility. Moreover, the design had to showcase the properties offered by UPM's innovative materials: UPM Grada thermo-formable wood material, UPM ProFi biocomposite, WISA plywood and UPM's label paper. The wood raw material in UPM's products is from sustainably managed forests and conforms to relevant standards and regulations.

The materials used for the Biofore Tea House:



UPM Grada main walls upmgrada.com



UPM ProFi



WISA Plywood Frame and decorative skin wisaplywood.com



UPM label paper back wall upmpaper.com "It was very interesting for us to try these new materials for the tea house design, especially in combination with other materials. It is our duty as designers in this age to try new possibilities to form the tea house. It's a historical challenge and an opportunity.

Our students were delighted to see the results in the varied concepts for the tea house. The flexibility of the materials and their special characteristics were really different from what our students had learned earlier in terms of details and space expression."

Professor CHEN Yonggun

Design that draws from the heritage



Shen Jingliang, explains the thinking behind the tea house design, whose working name translated from Chinese means "individual spiritual room".

"The main design was based on the craquelure pattern – a very traditional pattern and glazing effect in the porcelain process. The so called crackle porcelain has a long history in China and has a direct connection to the history of Chinese tea culture. Not only is this pattern light and aesthetic, it also showcases perfectly the properties of thermoformable UPM Grada. The modular bended elements of the pattern are quick and easy to manufacture by form pressing."

Designing an experience

The Biofore Tea House was designed to be more than a beautiful space for enjoying tea and good company. It was designed to be an immersive experience for anyone entering it. Designer Shen Jingliang elaborates:

"Light and shadows create moods and feelings. We wanted people to have different experiences in the tea house by alternating the density of the pattern of the wall and the ceiling from the entrance. You enter a darker space – and as you move forward towards the tea table the mood changes as more light filters in through the wall and ceiling patterns. The more dense the pattern, the less light filters inside – We didn't just design the space, we designed the experience."



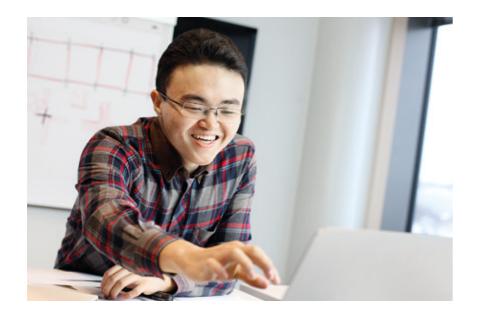


Welcome to the Biofore Tea House



Water is the mother of tea, a teapot its father, and fire the teacher.

-Chinese Proverb



"Starting with great teamwork and the fascinating tea culture to understanding the properties of UPM materials. This was a great learning experience!"

Designer Shen Jingliang





At Tongji University's College of Design and Innovation sustainability is regarded and valued as the main task of innovation.



"The thing I especially like about the final design of the tea house is the scene of the partly hidden and partly visible. It allures people to enter and experience it for themselves."

Designer YE Weijun







