



GlobalMBA Cohort 2012/13: Abstracts of Industry Studies

- **"Organic Food Retail in Urban China: Progress, Challenges, and Opportunities"**

Ann-Christin Leisching, Xiomara Nunez, Youyou Wang, Raoul Horn

Organic food is a growing niche in the food retail industry today. Markets in developed countries have successfully established organic food retailers with steady incomes and substantial consumer bases. The organic food market in China is still in its early stage. However, growing concerns about the food safety of domestically produced food have been fueled by numerous serious food accidents such as the milk powder scandal in 2008, which could be a key driver for even higher growth rates. Organic products realize price premiums of up to several hundred percent and are thus highly interesting for domestic and international producer and retailer. The purpose of the thesis is to investigate the potential risks and challenges for domestic and foreign investments. This paper provides an overview about the world leading countries in organic food, the Chinese food market and a detailed analysis of the current state of the Chinese organic food market. The analysis focuses on China's positioning in organic food retailing, social characteristics, economic aspects, organic food consumer, legal and regulatory aspects, and the numerous challenges of the growing market. The objective is to provide the reader with a realistic assessment of opportunities, challenges and risks of the Chinese organic food market and recommendations for further research are included.

- **"The Evolution and Prospects of Clean Coal Technologies in China"**

Anja Wilden, Jonathan Mann, Hao Wu, Manuel Oliveira Costa Carvalho

Over the past two decades China's economy grew by nearly 10 percent per year on average and has become the world's second greatest energy consumer. The main domestic energy

source in China's energy mix is coal, accounting for 70 percent. Worldwide, China is responsible for nearly half of the global coal usage and more than 80 percent of the global increase in coal demand, within the last 10 years comes from China. With that in mind, large-scale exploitation and utilization of coal is also one of the major causes of ecological destruction and environmental pollution. Coal was the leading contributor of all fuel combustion related CO emissions in the past few years. The continued growth in coal use makes it more urgent than ever to develop a strategy that unites the clear economic benefits of coal use with sustainable development goals. One of the primary solutions to this dilemma has consisted in developing and utilizing clean coal and carbon capture technologies. While clean coal technology functions by burning coal more efficiently, carbon capture aims to limit the release of greenhouse gases. These technologies were initially developed outside of China, but the country has engaged in the heavy importation of them over the past three decades. However, in order to meet national requirements of energy improvement and emission reduction, China began to build their own plants in the 2000s and invest in research and development. The combination of both has resulted in expanded knowledge and the desire to innovate more in the present and future. In order to gauge the condition of coal technologies and innovation in China, this study implements the National Innovation System and Triple Helix models. This hybrid model is employed to analyze the institutions of government, industry, and education, along with way in which they are linked. The main focus of the thesis is the evolution and development of China's new clean coal technologies, while a comprehensive overview of the current status of technologies on a national level will direct the study. Performance measures, such as diffusion, absorptive capacity, demand for R&D and innovation, and R&D capability are used to operationalize the developed model.

- **“Sustainability of Chinese Steel: An Industry Analysis”**

Martyna Gorska, Lu Li, Scott Rejonis, Kai-Rasmus Witt

This paper provides an overview of the global and Chinese steel industry and introduces the definition, methods, challenges and meanings of sustainable development in the steel industry. It then discusses the practical implications in economic, environment and social aspects by assessing sustainability indicators. The findings show that the Chinese steel industry is struggling to be profitable, having a negative impact on the environment and causing social dislocations. Conclusions are made that Chinese steel is, whether from an economic, environmental or societal viewpoint, not sustainable at this moment in time. However, if all

stakeholders involved follow changes that have been implemented or are about to be implemented, Chinese steel can make a big step towards sustainability.

- **“Feeding the Masses: Sustainability Analysis of Rice Production in China”**

Judith Hönig, Maximilian Miller, Jing Pang, Lin Shi

China is the most populous country on the planet with 1.3 billion citizens as of 2013. As this number continues to increase, it becomes increasingly difficult for the Chinese Government to provide enough food to meet the demands of its population. To combat hunger, the Chinese have worked towards increasing rice crop yields. However, their success has come at the expense of the environment. Soil degradation, contamination and erosion as well as water pollution have all occurred as a result of overplanting and the use of harmful fertilizers. Therefore, it is believed that current rice production methods in China are unsustainable. This means that if changes are not made to the process soon, the agricultural environment will continue to degrade to the point where it is no longer possible to grow rice. To solve this growing problem, China must make considerable efforts to improve the sustainability of the rice production process. This piece of work analyzes the economic, environmental, and social sustainability of current processes and investigate into potential drivers and barriers to make recommendations for improvements. In particular, the paper focuses on the value chain of rice production by breaking it down into four segments: seedlings, fertilizer and pest management, irrigation, and harvesting. As an outcome, it has been found that current growing methods are indeed unsustainable and result in more and more inedible rice each year due to contamination. If new processes and improvements in the value chain can achieve a balance between economic, environmental, and social sustainability, Chinese rice producers should be able to improve environmental conditions without sacrificing rice yields.

- **“Green Energy Transition in China: A Focus on the Offshore Wind Industry”**

Sebastian Hernandez, Sarah Hoffmann, Alissa Shaw, Mingxu Yang

The purpose of this research is to explore the green energy transition that is taking place in China, and, more specifically the offshore wind power industry. China has an abundance of wind energy resources and stands as a worldwide industry leader in both wind and solar industries. Additionally, the sheer size of the population and the heavy industrialization

within the country are further indicators of rapid development. Along with this is the opportunity for China to supply power to its coastal regions by constructing offshore wind projects – hence, the primary focus of this paper is to examine the new movement toward offshore wind power generation and its effect on supporting domestic industries. Policymakers in China have shown a commitment to integrate environmental policies in the future (including wind power growth) and are backed by ambitious goals set forth by the government as defined in the “12th-Five-Year-Plan” and “Medium- and Long-Term Development Plan for Renewable Energy”. In light of these ambitions, this paper aims to uncover the challenges faced by both the Chinese government and domestic firms operating in the wind power industry. Furthermore, an in-depth analysis of the complete wind turbine manufacturing industry is conducted, with an emphasis on cultural-specific characteristics and the competencies of domestic firms to further develop their indigenous innovation capabilities as new technologies emerge in the offshore sector. The likelihood for China’s offshore wind power industry to become competitive is high, so long as the main challenges identified in this piece of work are addressed and a conscientious approach to installed capacity targets are developed.