Limits to growth?

One can almost feel the rapid growth occurring in Shanghai's Pudong district. Skyscrapers seem to pop up overnight. In the tradition of infrastructural projects on the scale of the Great Wall, China's economic boom has spurred the development of a new deepwater port located some 30 miles out to sea.

China's rapid economic development is witnessed most impressively in Shanghai's Pudong district. Twenty years ago, this was a poor neighborhood in the east end of the city. In 1990, the rebuilding of Pudong began, and since then, the gross domestic product (GDP) here has grown by a factor of 12. Today, Pudong is counted among the places in the world with the greatest number of skyscrapers. Soon, over 1,000 office and residential towers will stand in this district, among them the Shanghai World Finance Center – at almost 500 meters the second highest building in the world.

The development of Pudong has become an international effort. Foreign companies have invested over 40 billion dollars in the district over time. Pudong fascinates city planners because here urban development can be observed in fast forward, so to speak. The development of infrastructure must keep up with China's economic boom, so Shanghai invests enormous sums in public transportation and sewer systems.

Partly because of the boom in Pudong, the port of Shanghai – one of the largest in the world – has displayed explosive growth rates in recent years. Within the last decade, the

volume of goods moving in and out has risen by nearly 30 percent per year. The harbor has now reached the limit of its capacity, and as container ships grow increasingly larger, many can enter only at high tide. To address these issues, the Chinese government decided to build one of the world's largest deepwater ports, with up to 50 docks.

The new Yangshan deepwater port is located on a tiny rocky outcrop of Qiqu Island in the Bay of Hangzhou, at the mouth of the Yangtze River, about 30 kilometers off the coast. Here, the water is deep enough for the largest freighters in the world to dock. The port project, which has been broken into four phases, is expected to be finished by 2020. The first phase is currently under construction.

An integral part of the project is the 32-kilometer-long six-lane Donghai Bridge, which connects the island terminal to the mainland. Recently completed, this is the first true ocean bridge to be built in China. On the mainland near Luchaogang a new port city is also under construction, with a port terminal to augment the deepwater terminal on Qiqu Island.