

Partnering with China

The Fudan Tyndall Centre in Shanghai is an innovative institute dedicated to interdisciplinary climate research. Professor Trevor Davies of the University of East Anglia, who co-directs the centre with Professor Yiqi Luo, talks to *Nature Climate Change* about the initiative.

■ What was the impetus behind establishing the Fudan Tyndall Centre?

The Tyndall Centre is a partnership between eight universities in the UK that conducts research to inform policy for both mitigation and adaptation. To ensure the research is of relevance for international policy, we need to work closely with researchers from countries where national policy is of global importance. With that aim, we have developed a strong institutional partnership in China to establish the Fudan Tyndall Centre. This is exciting because China is now the largest greenhouse-gas emitter in the world. China is now a very big part of the problem, but it can also be a crucial part of the solution.

■ When was the centre launched?

The centre was launched in Shanghai at the end of May. We've been developing relationships with several centres in China over the past four to five years and the collaboration has come true in quite a big way with Fudan University, one of the top universities in China.

■ What were the reasons for choosing Fudan University in China?

We have long-standing links with Fudan University, and the university itself is influenced by the growing awareness of the importance of interdisciplinary research in China. They also understand the benefits of strong international collaboration. Importantly, the university was prepared to seek the substantial financial support needed for long-term planning and commitment. So much of it, in the end, came down to determined leadership.

■ Where is the financial support coming from?

The bulk of the funding is coming through allocations from the Chinese and Shanghai governments. This will amount to around £20 million for the first four years; a real encouragement is that the university sees this as a partnership lasting at least 15 years. Of course, we hope that this will be a solid foundation for applying for further funding from other agencies.



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Executive Vice President Chen (left) and Professor Xu of Fudan University, together with members of the Chinese Academy of Sciences, arrive for the launch of the Fudan Tyndall Centre in Shanghai on 27 May 2011.

■ How difficult was it to set up the collaboration in China?

It is relatively easy to sign a memorandum of understanding, but the real challenge is to have the resources for substantial long-term programmes. For Fudan to agree to provide the funding for a major programme, we had to build their trust in us over a number of years. We also had to gain the confidence of people at high levels of the Chinese government.

■ What are the key projects at the Fudan Tyndall Centre?

We are ramping up specific projects on water security and management, and nitrogen cycling. We also want to understand the characteristics of high greenhouse-gas-emitting social groups in China, the UK and a couple of other countries, and their potential readiness to change behaviour to drive innovation for emissions reduction. Finally we're exploring issues around urban infrastructure transitions.

■ Will the dissemination of research at the Fudan Tyndall Centre be difficult if it challenges the government's plans?

We're well aware of the reliance of China's enormous economic growth on fossil fuels. The Chinese government does understand the importance of responding to climate change; it recognizes its current impacts, and likely future impacts, on the national economy. Officials in the National Development and Reform Commission have indicated interest in the findings of the Fudan Tyndall Centre. I think that China will be prepared to listen, although, of course, I balance this optimism with the realism that national and international politics respond to a variety of drivers.

■ How does the centre operate? Is it a regional collaboration?

There will be a recruitment campaign with, ideally, some of the positions available for joint appointment, like mine is. There will certainly be an exchange of MSc and PhD students, and post-docs between Fudan University and the Tyndall universities in the UK. The decision-making body will have representations from both the UK Tyndall Centre and Fudan University. The international advisory board is co-chaired by Professor Xu Guanhua, who was Minister of Science and Technology from 2001 to 2007, and Professor Robert Watson, Chief Scientific Adviser at Defra and Director of Strategy for the UK Tyndall Centre. We aim to be administratively, as well as functionally, integrated; we're planning research programmes jointly.

■ Do you have any plans for starting a similar collaboration elsewhere in the future?

Our immediate priority is to establish the interdisciplinary platform at the Fudan Tyndall Centre. But an eventual possibility is a Chinese Tyndall Centre partnership, involving a number of strong climate change research institutions, and with a powerful connection between the Chinese and UK partnerships.

INTERVIEW BY MONICA CONTESTABILE