CHINA'S
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From Citizens to Sensors:
Third-Wave Data in China's Environmental Management

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China Centre, the Ho Tim Seminar Room

When it comes to our most pressing environmental challenges, much of the data needed to take effective action are missing. Water quality, recycling rates, toxic chemical exposures, land degradation – assessing these environmental issues is hampered by the lack of consistent, global information pathways. Where data exist, they are often incomplete, erratic or untrustworthy. Even if accurate, data may be based at a resolution or scale inapplicable to the policy question at hand. The flood of information poses new problems of its own, often creating more noise than clear signals. In China, recent announcements by the government have signalled a new opportunity to scope the potential for novel data approaches, including big data (e.g., satellite data) analysis as well as bottom-up methods (e.g., citizen science) to help address these data challenges, utilizing a mix of inventive and cutting-edge techniques Angel Hsu calls 'third-wave data'. 'Third-wave data' has the potential to engage new actors (e.g., citizens and technologists) and audiences in environmental data collection, improve linkages between policy-making and monitoring, and facilitate collaboration across private and public sectors. The presentation discusses the application of third-wave data approaches in China, with a particular focus on how these new data methods may work to address intractable gaps in China's existing environmental monitoring and how they may also inform new policy developments, such as those on green finance. What is the potential and pitfalls for these Third-Wave approaches for China's environmental governance?

Angel Hsu is an Assistant Professor of Environmental Studies at Yale-NUS College in Singapore and adjunct of Yale School of Forestry and Environmental Studies. She founded and directs Data-Driven Yale, an interdisciplinary research group that applies data-driven approaches to environmental policy questions. From 2010–11 she was a Fulbright scholar at Tsinghua University. She is a British Academy visiting fellow at the Blavatnik School of Government.