Impact Objective

- Address the following priority themes under the Green Economy area: the greenness and dynamics of economies; metrics and indicators for a green economy; policies planning, and institutions (including business) for a green economy; and green economy in cities and metropolitan areas

Beyond climate change

__Raimund Bleischwitz__ is the __Principal Investigator__ of __SINCERE__, a project designed to advance resource efficiency and circular economy aspirations. Here, he discusses the importance of the project, some of the key drivers behind it, and his collaborations with colleagues from China

Can you begin by explaining why understanding the world's green economies better is such an important topic to investigate?

A green economy goes beyond climate change and addresses relevant planetary boundaries as well as the UN Sustainable Development Goals (SDGs). We need to go beyond the silo of energy and analyse industrial and societal transformations over time and in a comparative approach. China is a key player in the world economy, and is expected to become more important in the years ahead. The SINCERE (SINo-european Circular Economy and Resource Efficiency) project has done work on international commodity trade, and on the role of materials as drivers for economic growth.

What were the key drivers behind establishing the SINCERE project and what are the main impacts of this project?

Five main national funding agencies from the UK, China, Germany, France, and The Netherlands had launched a call for collaborative projects on the green economy as well as on population change. The SINCERE project has strong roots in economics and social sciences as a whole, yet we also collaborate well with environmental research and engineering. A first report on comparative policies served as background information to members of the European Commission's circular economy mission to China in November 2016. A final conference takes place at Chatham House, a world-leading think tank, addressing policies and business issues.

SINCERE all-partner meeting in Shanghai October 2015

This is a collaborative project between the research team and key partners. How important is this collaboration to the success of the project?

Collaboration is key! Clearly, without the excellent Chinese partners we would not be able to carry out such a project. The European side, however, is crucial too, as we collaborate across economics, policy analysis, system dynamics modelling, macro-economic modelling, and socio-technical transition research. Many papers have been co-authored across partners. We now understand better the planning culture and governance structures in China, and the eminent role of industrial parks, all underpinnings to metrics and indicators for a green economy.

Can you talk a little about your collaboration with Professor Geng Yong? Why is his knowledge on the circular economy in China so valuable to this work?

We have calculated the outstanding contribution Professor Geng Yong has made to circular economy research in China via bibliometrical analysis – he is the most-often cited researcher in this field. Beyond this, he has been incredibly valuable in bringing other researchers on board, from his university, other Chinese universities, and from other East Asian research communities. This has been quite exceptional, and we are really grateful for his share, in particular as he became Dean during the project duration.

What are your hopes for future collaborations between University College London (UCL) and Shanghai Jiao Tong University (SJTU)? How do you see this benefiting your on-going work?

With the MoU now signed between UCL and SJTU and its brand-new Low Carbon College we look forward to more collaborations in the future, such as a dual MSc on the circular economy, a visiting programme, and more research on sustainable growth.

Finally, how important is it to provide evidence on resource efficiency for policy makers to support the development of high-level policies? How do you see SINCERE is able to influence policy makers in this regard?

We very much hope the economic modelling results and our suggested indicators and pathways will have an impact on policies. The final conference with Chatham House might help spread the word, but we also need to communicate more effectively. It is of pivotal importance to look at collaborations – and at the existing competition – between Europe and China. Many research results lack this comparative approach and a collaboration perspective. The many partners in this project can convey and expedite our research outputs to policy makers in the OECD, UNEP's International Resource Panel, China, UK and the whole EU, and core member states Germany, The Netherlands, France, as well as stakeholders in Europe and Asia. I also believe there is a demand for research on pathways into green economies with insights into societal changes and smart policies, triggering technological developments and markets.

The green light for circular economies

SINo-european Circular Economy and Resource Efficiency (SINCERE) *is a unique project that seeks to understand the world's green economies in a better way. The findings should help develop knowledge about how China is shaping the green shift and the way it operates provinces, countries and industries*

Green economy is a term that was first coined in 1989, when a group of leading environmental economists produced a report for the UK government. Since then, it has become a term that is broadly used in the context of addressing multiple global crises related to the environment. Indeed, given the overwhelming amount of evidence in support of the notion that human activity is significantly contributing to climate change and global warming, the need to create green economies the world over is ever-pressing.

With that in mind, the SINo-european Circular Economy and Resource Efficiency (SINCERE) project has been established. This three-year project, which began in 2015 and is set to be completed in early 2018, is designed to develop new economic modelling tools to improve understanding of the resource use patterns in China and the European Union. Raimund Bleischwitz is the Principal Investigator and, as such, is acutely aware of the challenges facing the EU and China in regards to green economies. 'Air pollution has returned as a key challenge in Europe, and it is pertinent in Chinese cities. Much of it is related to construction activities, urbanisation, and industrialisation,' explains Bleischwitz. 'Both the EU and China intend to transform their energy systems from being fossil fuel based to clean energy. Together with a circular economy this will move towards what China calls an 'ecological civilisation', or 'sustainable consumption and production' as we call it in Europe.'

A GROUP EFFORT

This is a sizeable task that is obviously not easy to achieve, so the SINCERE consortium has completed media analysis to understand how these issues are perceived in both regions. In acquiring this understanding, the team is better positioned to turn the challenges into eco-innovation opportunities, e.g. through cases of eco-cement and green ICT.

To make sure the project is successful, SINCERE is divided into different research areas and work packages. Some of these research areas include international long-term dynamics, metrics and indicators, innovation policies, and modelling. In addition regular calls, consultations, visits and workshops are performed to generate new knowledge and facilitate smooth communication between Chinese and European researchers. Researchers from University College London and Shanghai Jiao Tong University have signed a Memorandum of Understanding to ensure that the collaboration is effective and doesn't stall in the future. Upon completion, it is expected that the body of research generated will prove useful to policymakers. It is vital that the individuals and groups responsible for implementing changes have evidence to support their suggestions. To advance resource efficiency and circular economy aspirations, it is essential that SINCERE develops indicators for studying the green economy. By quantifying the likely economic implications of improving resource efficiency, policymakers will have data within the necessary context.

SHARING KNOWLEDGE

To achieve the desired impact, Bleischwitz and his team are focused on engaging with stakeholders to involve them directly in the work, but disseminating the findings is equally important. Fortunately, this is something that is already underway. 'We expect some twenty papers to come out of the SINCERE project,' says Bleischwitz. 'A special issue on the circular economy has already been published in the International Economics and Economic Policy journal.'

Ultimately, there are many positive steps being taken in China and across the EU, but there is still so much to do. SINCERE will highlight the positives, but it will also identify the gaps. In so doing, researchers, stakeholders and policymakers can start filling them in.

Project Insights

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