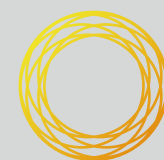


RENKEI

Biennial Report

April 2019 - March 2021



RENKEI

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From British Council

The past two years have been a time of both challenge and innovation for the RENKEI consortium. The Covid-19 pandemic has caused enormous loss and disruption, but we have been able to continue our core work of generating and supporting research collaborations to tackle some of the major challenges of our time. We have also introduced some promising initiatives.

2019 saw a very successful second Climate Change researcher workshop hosted by Newcastle University. This convened a diverse group of over 40 researchers to produce concrete research proposals as well as learn from policymakers and industry. Two of these projects - on using citizen science for water management and on community-based forest management - were chosen for the first ever RENKEI seed funding awards.

We intended to build on these developments with a third Climate Change workshop hosted by Kyoto University; but the global pandemic and its associated travel bans forced us to redesign this workshop, which was held online in December 2020 and January 2021. Although we missed the opportunity to meet and deepen existing and new relationships in person, the online format allowed us to involve a wider range of colleagues worldwide. Over 80 researchers from a wide range of disciplines participated, broadening the discussion beyond the natural sciences and engineering to encompass finance, sociology, psychology, and other interdisciplinary areas. We were privileged to receive contributions from high-profile speakers, including Ken O'Flaherty, the UK government's COP26 Regional Ambassador for Asia/Pacific and South Asia, and Dr Hikaru Kobayashi, a civil servant in Japan's Ministry of the Environment who worked on the Kyoto Protocol.

In the final session of this workshop, the British Council issued a call for new UK-Japan-ASEAN projects on clean growth. I am delighted to report that Kyoto and Southampton led a successful bid, working closely with Newcastle, and are now developing strategies for modelling water resource risks.

Despite the pandemic, 2020 marked important milestones in the friendship between Japan and the UK. In October, the two countries signed a Comprehensive Economic Partnership Agreement and in December, the UK announced the new Turing Scheme, which promises to increase the number of UK students studying in Japan. More recently, the UK government has stressed the place of Japan as 'one of [its] closest strategic partners'.

Universities have a crucial role to play in carrying forward this close bilateral friendship and in helping our societies to respond to the issues of our time. RENKEI's strategic focus on health and climate change could not be more important or more timely, and we look forward to the Health Researcher workshops, to be hosted online by Nagoya University.

In a recent steering committee, we committed to a consultation with members about ways to further raise RENKEI's profile and to engage with senior stakeholders in government and business. The British Council is now concluding a full evaluation of the consortium, incorporating these questions, and will report back with recommendations. In 2022, we will celebrate RENKEI's 10th anniversary. I hope that the Covid-19 restrictions will have eased to allow a special event, as we also consider the priorities for the coming years.

Last, but by no means least, I am delighted to formally welcome our newest member, Durham University, who joined us in June 2021.

Matthew Knowles
Director Japan, British Council
June 2021



The Japan-UK Research and Education Network for Knowledge Economy Initiatives (RENKEI, the Japanese word for “collaboration”), a partnership of twelve leading universities in the UK and Japan, was established in March 2012 with the British Council as its secretariat.

Japan and the UK have a long history of partnership and share many common interests and concerns. The two countries have strong economies and are among the world’s foremost producers of cutting-edge research and technology. They face similar demographic, political, social and industrial challenges, and thus are ideal partners in meeting these demands with innovative solutions.

Member universities have established a close relationship and delivered multiple international workshops in Japan and the UK. Since 2018, RENKEI has been focusing on “climate change” and “health” as its themes for research collaboration. Both of these were included in the “Japan-UK Joint Declaration on Prosperity Cooperation” released jointly by the Japanese and UK Prime Ministers in September 2017 as part of the key framework of cooperation.

RENKEI universities are working with stakeholders in the government, industry, and non-profit sectors to develop innovative solutions to realise low carbon societies and to tackle dementia, patient safety, and other related challenges. Workshops addressing climate change have been held both face-to-face and online, and RENKEI has provided seed funding for two bilateral projects led by early career researchers. The first workshop on health, meanwhile, will be held in June 2021, aiming to spark new research collaborations in this field.

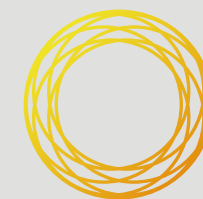
About RENKEI



RENKEI



Japan



RENKEI



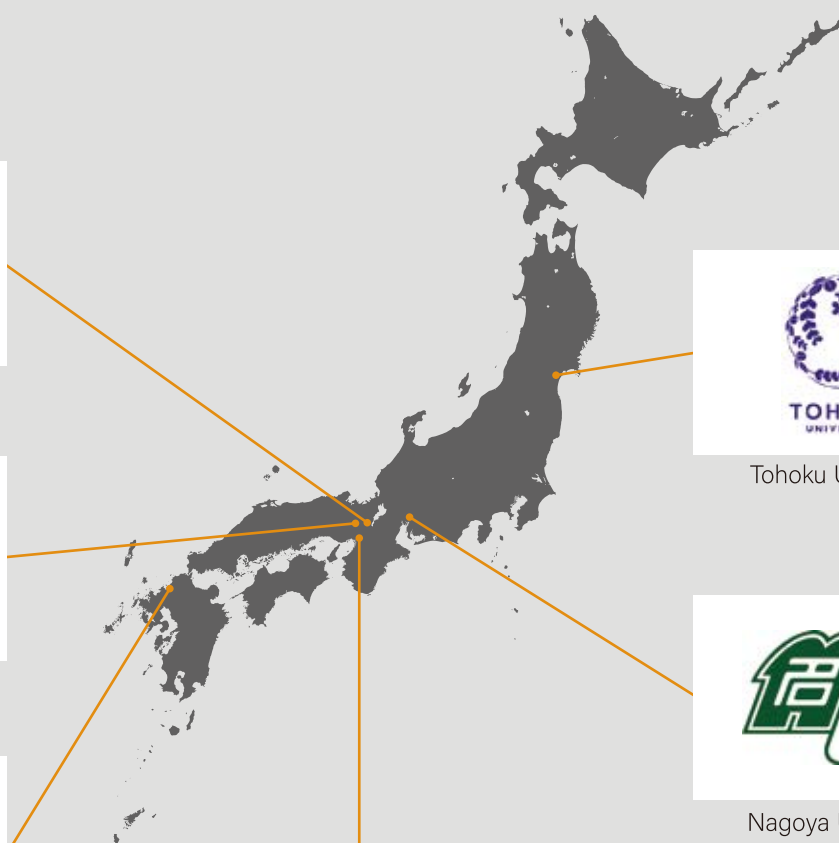
Ritsumeikan University



Kyoto University



Kyushu University



Tohoku University



Nagoya University



Osaka University

RENKEI Member Universities

UK



RENKEI activities

RENKEI Researcher Workshop:

Developing Japan-UK Research Collaboration in Climate Change, Newcastle, 2 – 4 December 2019

Newcastle University hosted the second RENKEI workshop on climate change over three days in December 2019. The participants, 19 researchers from 5 Japanese universities and 17 researchers from 5 UK universities, were a diverse group: 47% of participants were female, 53% of respondents to the workshop survey identified themselves as early career researchers, and each university sent at least one researcher from the social sciences or humanities.

This diversity was key to the the generation of interdisciplinary research proposals by teams working on the six sub-themes of the workshop, and also of RENKEI' s climate change work:

- Low carbon societies and green infrastructure
- Future risks and adaptation in floods and water shortage
- Future risks and adaptation in food production and security
- Managing future risks and building resilience in urban areas
- Future risks and adaptation in ecosystems
- Future risks and adaptation in human health

Despite only having a few hours of focused interactive sessions in which to develop their research plans, the working groups came up with proposals of extremely high quality. These proposals included “Virtual twinning” of British and Japanese cities to share expertise on low-carbon transport networks which double as flood prevention measures; creating maps of sustainable resources; and the development of an outreach toolkit to transfer university sustainability initiatives to local communities, among others.

Two groups were awarded seed funding of GBP 5,000 each; their progress reports are on page 9. Several of the other groups also plan to implement their research using other funding. According to the event survey, 65% of Japanese participants and 85% of UK participants identified common issues which they wished to pursue further with researchers from the other country, while 76% of Japanese participants and 69% of UK participants found potential research collaborators with whom they intended to follow up.



RENKEI seed funding

Each of the working groups at the RENKEI Climate Change workshop at Newcastle University gave a short pitch for seed funding on the final day. A panel of RENKEI representatives, including both senior and early career researchers and a member of the secretariat, chose the following two projects to receive funding of GBP 5,000 each. The projects have since had to be reconfigured in the light of unforeseen travel restrictions, but are moving ahead and generating further collaboration.

Improved Water Management – A Citizen Science Co-Design Approach

This project is being undertaken by researchers in the UK and Japan from the universities of Newcastle, Kyoto, Tohoku and Kyushu. The original intention was to work with farmers in Kobe to support the reduction of flooding from irrigation ponds by increasing access to rainfall information.

Coronavirus travel restrictions resulted in a redesign of the project to support the key aim of collaborative working between the UK and Japan. Members of the respective universities, from senior professors to PhD research students, have installed rain gauges at their homes or on campus to learn about citizen science. Data collected from the gauges will be shared between the participants, to discuss the potential for citizen science in future research opportunities.

If travel restrictions are lifted by October 2021, a Newcastle University PhD student will travel to Japan and participate in workshops with the respective Japanese Universities. If travel is not possible, alternative online channels for collaboration will be utilised.



Community-based forest management in Japan

This RENKEI project was originally a collaboration among researchers at the Universities of Southampton and Liverpool in the UK, and Kyushu and Tohoku Universities in Japan. We have since extended our collaboration to include researchers at the Universities of Tokyo, Cambridge, and Yokohama National University. We plan to do a research prioritisation exercise, to identify the priority research questions that, if answered, will improve sustainable forest management in Japan. We will solicit questions from policymakers, practitioners and scientists, and hold a virtual workshop to process the questions. We have secured further funding from the Great Britain Sasakawa Foundation (£5,000) and the DAIWA Foundation (£5,000). If travel is possible later this year, the UK researchers will travel to Japan to process the questions, write a paper and disseminate the findings.



RENKEI Researcher Online Workshop

Expanding Japan-UK Research Collaborations in Climate Change

The third RENKEI climate change workshop was originally scheduled for Kyoto University in June 2020, with a discussion-based programme building on the research proposals generated in Newcastle, as well as opportunities to involve more PhD students and representatives from industry. However, the intervention of COVID-19 forced us to change our plans, and the workshop was instead held online over two sessions, in December 2020 and January 2021. Although the shorter, online format limited the opportunities for in-depth group work, it had the advantage of enabling wider participation, attracting around 80 researchers from a broad range of disciplines and career stages, several of them new to RENKEI.

The first day featured various keynote speakers, drawn from the policymaking and higher education sectors in both countries, who underlined the importance of RENKEI, given the broad range of expertise it encompasses and the overlap between UK and Japanese climate-related policy and goals. They also posed some constructive challenges about the role which RENKEI could play in the run-up to COP26 in Glasgow.

Two panels introduced a variety of current climate research, with the aim of identifying new joint projects, and in the final panel session, participants shared climate-related policies and campus sustainability initiatives being taken by higher education institutions and their networks.

The second day built on these panels, with parallel groups for further discussion on opportunities for joint research on climate change-related topics and Japan-UK university collaboration on carbon reduction initiatives. Collaborative research and challenge areas that emerged from the discussions included walkable or "15 minute" cities; post-COVID recovery options and opportunities in urban systems with respect to accelerated decarbonisation challenges; the impact of climate change on tropical forests in Latin America and Southeast Asia; economic analysis of climate-related disasters; and the mapping of higher education institutions in the two countries regarding their sustainability policies.

Reflections from the host

Professor Yasuto Tachikawa, Kyoto University

Looking back on the 3rd Online Climate Change Researcher Workshop

Climate Change Researcher Workshops were held twice over the Internet, in December 2020 and January 2021. Their purpose was to develop the cooperative relationships that we had previously built into concrete joint research. Due to the worldwide spread of COVID-19, the face-to-face workshop which was to be held in Kyoto in June 2020 had to be cancelled. Nevertheless, I believe that the online workshop achieved the same results as a face-to-face workshop.

Considering the 9-hour time difference, each workshop could be no longer than 3 hours. To achieve results within a limited time, the workshop was divided into two parts a month apart, the first focusing on keynotes and panels for sharing mutual interests, and the second focusing on group discussions. As a concrete result of these discussions, the University of Southampton, Newcastle University, and Kyoto University formed a research group and submitted a research proposal on “Integrated Strategies for Water Resources Risk Management in the ASEAN Region Under Climate Uncertainty: A Needs Analysis” to the COP26 Trilateral Research Initiative, together with ASEAN partners.

Fortunately, this research proposal was successful, and joint research has now begun. Such concrete joint research is a major achievement of the second phase of RENKEI that started in 2018. Many early career researchers are participating in this research plan, which will deepen collaboration between early career researchers in Japan and the UK, materialize collaboration across generations, and promote joint research that contributes to solving problems in the global society. We look forward to seeing this research project develop.

Feedback from participants

Professor Brendan Barrett, Osaka University

The RENKEI Researcher Online Workshops on Climate Change provided a unique opportunity to bring together researchers from both countries working in this field. The virtual workshops were very well organized and attracted participation from across the RENKEI network of universities. I contributed to the sub-area of low carbon societies and green infrastructure, and found the presentations from my peers to be very interesting and relevant to my own work. As a venue to promote information sharing on contemporary research themes, I believe the workshops were very successful.

For future workshops, I believe that emphasis could be placed on the identification of topics for research collaboration between Japan and the UK. It would be useful if additional workshops could be held in 2021, especially in the run up to COP26.

Dr Hisako Nomura, Kyushu University

At the workshop on December 10th, I introduced my current research and the collaborative research using RENKEI seed funding which we received at the 2019 workshop held in Newcastle. A doctoral student from our UK partner was planning to come to Japan to hold a workshop on citizen science, which is not yet widespread here. Unfortunately, she was unable to do so due to the COVID-19 pandemic. I hope that we can continue to develop our potential research collaboration someday once we can start travelling back and forth between Britain and Japan. However, this workshop was the first time to see each other online since Newcastle. I was very happy to see the names on Zoom of both the British and Japanese researchers whom I had met there the year before.

The workshop was held twice this time. It attracted the interest of many researchers, and I hope many applied for the COP26 Trilateral Research Initiative. I am not sure whether or not this year's workshop would have been successful had all the researchers who participated met for the first time online, even with the funding opportunity offered. I think that it was possible to connect this time because of the RENKEI workshop in Newcastle in 2019.

Professor Andy Cundy, University of Southampton

The RENKEI climate change workshops were hosted virtually by Kyoto University, and while the online format inevitably missed some of the usual opportunities for more casual discussions and interactions between participants it did allow very effective engagement of a much wider range of academics and other partners than usual, including early career researchers. From Southampton's point of view, the meeting format allowed engagement of researchers from across three of our five Faculties, spanning and integrating research areas ranging from finance, through sustainable transport, to marine ecology. This had real benefit in driving discussions beyond the subject disciplines that have previously formed the focus of RENKEI climate change meetings (usually based around science and engineering) into new interdisciplinary areas. Overall, I felt that the workshops were a great success, and thanks and appreciation are due to Professor Tachikawa and his team at Kyoto for their efforts in moving the workshops online and supporting their delivery.

Dr Cristina Garcia, University of Liverpool

Research and the finding of nature-based solutions to cope with climate change is a global endeavour that requires the coordinated efforts of international teams. I attended the RENKEI workshop in early 2020 to expand my network of collaborators working on the responses of ecosystems to climate change. This workshop showcased a wide range of projects involving various RENKEI members in the UK and Japan. These projects evaluated the prospective risk of massive flooding across the UK, the resilience of ecosystem, and natural-based solutions to achieve carbon-zero targets, among others. This workshop allowed me to contact researchers based in Japan institutions to brainstorm some ideas for future collaborations. We will explore the possibility of submitting grant proposals in the future to evaluate the losses and gains of ecosystem services across a wide range of habitats both in the UK and Japan to identify habitats that potentially could increase their CO2 storage and water regulation functions, among other key ecosystem services.

You can read more in the report*, and also watch clips of the workshop.**

* https://www.britishcouncil.jp/sites/default/files/report_renkei_researcher_online_climate_change_workshops_2020_2021.pdf

** <https://www.youtube.com/watch?v=rj7JgLBkwqY>

RENKEI Researcher Online Workshop

Exploring Japan-UK Research Collaborations in Health

The plans for RENKEI' s first workshop on the topic of health, hosted by Nagoya University, have also been altered because of the pandemic; the workshop will now be held online over two days in June 2021.

The workshop will focus on three sub-themes of health:

- Patient safety
- Medicine and informatics
- Ageing

As this is the first RENKEI workshop in the area of health, and given the time constraints of an online workshop, the main aims of the workshop will be for RENKEI members to learn more about each other' s research expertise and interests in the areas of health, and to identify potential for collaborative research. In order to encourage the latter aim, we plan to award three seed funding grants, one for each sub-theme, to collaborative research proposals developed by participants on the basis of research ideas identified during the workshop.

RENKEI Researcher Online Workshop
Exploring Japan-UK
Research Collaborations in Health

Organising Committees

RENKEI' s activities are led by its members and, in particular, the Organising Committee for each of the RENKEI themes.

Climate Change Organising Committee members

Yasuto Tachikawa	Professor, Department of Civil and Earth Resources Engineering	Kyoto University
Nobuya Mizoue	Professor of Forest Sciences, Department of Agro-environmental Sciences, Faculty of Agriculture	Kyushu University
Daisuke Komori	Associate Professor, Department: Graduate School of Engineering	Tohoku University
Jon Turner	Director, Institute for Academic Development	University of Edinburgh
Jouni Paavola	Professor of Environmental Social Science at the School of Earth and Environment; Director of the UK Economic and Social Research Council (ESRC) funded Centre for Climate Change Economics and Policy (CCCEP)	University of Leeds
Phil James	Director National Urban Observatory Facility Newcastle, Senior Lecturer in Engineering, School of Engineering	Newcastle University
Andy Cundy	Professor, Director of Internationalisation / Research Director, GAU-Radioanalytical School of Ocean and Earth Science National Oceanography Centre (Southampton)	University of Southampton

Health Organising Committee members

Jon Turner	Director, Institute for Academic Development	University of Edinburgh
Spencer Hazel	Senior Lecturer in Applied Linguistics and Communication	Newcastle University
Atsushi Nakagawa	Director, Institute for Protein Research	Osaka University
Hideki Kasuya	Presidential Advisor (Professor)	Nagoya University
Seiji Sumigama	Designated Associate Professor, Graduate School of Medicine	
Izumi Tabata	Professor, College of Sport and Health Science	Ritsumeikan University



RENKEI Steering Committee meetings

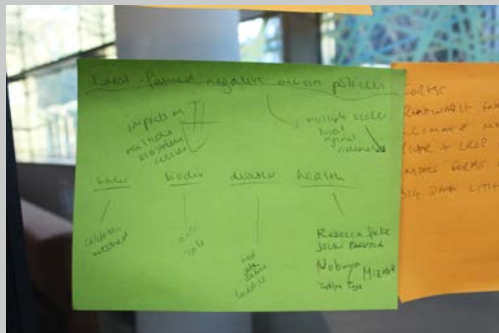
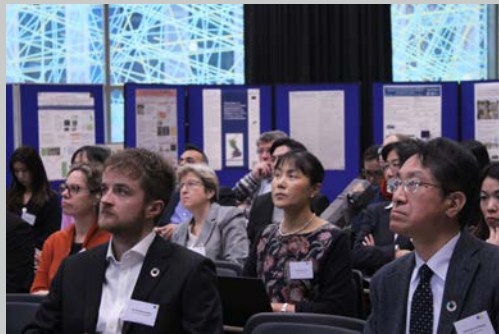
FY 2019

The Steering Committee meeting was hosted by Newcastle University immediately after the Climate Change researcher workshop. Steering Committee members discussed key issues for RENKEI' s future development, including the thematic areas for RENKEI activities and the most appropriate governance structure to enable the consortium to influence policymakers and funding bodies in each country. Members also had an opportunity to tour Newcastle' s historic city-centre campus.

FY 2020

The Steering Committee meeting was held online, due to travel restrictions, in January 2021. Members agreed to maintain RENKEI' s focus on climate change and health, choosing specific issues within these areas. The short meeting time did not allow members to reach a conclusion on questions relating to governance and finance; these will be discussed further during interviews planned for early summer 2021 (see page16).

Future directions for RENKEI



The current RENKEI membership term is due to end in March 2023, and so we are considering the consortium's achievements so far and exploring directions for its future. We began by conducting an online survey in the summer of 2020, which received 13 responses.

Members feel that RENKEI has increased their understanding of the other country's higher education sector and their confidence in working with universities there. Around half of the respondents are developing joint research agendas, with several joint research projects underway. All believe that the partnership has been successful and mutually beneficial.

Going forward, expectations for the development of further joint research are growing, and there is potential for RENKEI to work more strategically to leverage and influence government and third-sector funding initiatives, as we have begun to do around COP 26. There also appears to be interest in collaboration on joint education programmes, particularly at postgraduate level. We are about to hold consultations with members to explore their strategies and plans for these areas, and to consider how RENKEI can best support members in achieving their broad institutional objectives for UK-Japan collaboration as these continue to evolve.

Future directions for RENKEI