



Building Roadmaps to Industrial
Decarbonisation and Green Economy
through EU-China Cooperation

D8.2 – Quality Assurance and Risk Management Plan

WP8 – Project Management

<https://www.eu-china-bridge.eu>

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EC Summary Requirements

1. Changes with respect to the Description of the Action (DoA)

None

2. Dissemination and uptake

This deliverable is confidential and intended for internal purposes only

3. Short summary of results (<250 words)

The deliverable outlines the measures taken to ensure the quality of scientific and outreach outputs of the EU-CHINA BRIDGE project and presents a risk management plan that identifies potential risks, assesses their impact, and details strategies for mitigation.

4. Evidence of accomplishment

Report

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Preface

EU-CHINA BRIDGE will support the transition to a climate-neutral and resilient society in both Europe and China by jointly advancing knowledge on technology innovations and roadmaps for decarbonising energy intensive industries, co-creating innovative modelling by combining cutting-edge bottom-up and integrated assessment modelling to quantify net-zero sustainable pathways, and developing the most updated and comprehensive emissions data. It will intensively engage relevant stakeholders from both regions, enhancing dialogues, and fostering mutual learning among policymakers, industries, and experts. It will deliver two open-source EU-China joint technology inventories of promising net-zero emission technology options for the iron & steel and chemical industries, two co-implemented demonstrations of promising technologies in China, and co-created scale-up paths and roadmaps of the selected industrial technologies in both regions. It will also develop the most up-to-date, high-resolution, multi-sectoral, national and regional GHG and short-lived climate pollutant emission inventories as well as dynamic monitoring of key emission sources at high spatiotemporal granularity. A state-of-the-art modelling framework will be developed, exploiting and advancing cutting-edge and established modelling tools for EU and China, using the latest emissions data, representing technology and policy options, enabling assessment of socioeconomic impacts, covering multiple economic sectors and regions, and offering high spatial and technology detail. The enhanced models will be used to co-produce net-zero pathways for the EU and China, explicitly assessing co-benefits and trade-offs of climate policies with other societal goals while exploring cooperation policies and governance to drive the global transformation and assessing the distributional and global-level implications of the two regions' decarbonisation. The pathways will be documented in new workspaces in the I²AM PARIS platform.

WI – Wuppertal Institut fuer Klima, Umwelt, Energie gGmbH	DE	
E3M – E3-Modelling AE	GR	
IIASA – Internationales Institut fuer angewandte Systemanalyse	AT	
UoB – The University of Birmingham	UK	
ICCS – Institute of Communication and Computer Systems	GR	
HOL – HOLISTIC IKE	GR	
ITE – University of Kassel	DE	
THU-SA – Tsinghua University	CN	
THU-CE – Department of Chemical Engineering, Tsinghua University	CN	
THU-DESS – Department of Earth System Science, Tsinghua University	CN	
RUC – Renmin University of China	CN	
SDU – Shandong University	CN	
CHINACOAL – China National Coal Group Corporation	CN	
BITARIM – Advanced Research Institute of Multidisciplinary Sciences, Beijing Institute of Technology	CN	
FULONG – Inner Mongolia Fulong Heating Engineering Technology Co., LTD	CN	
BIT-ME – School of Mechanical Engineering, Beijing Institute of Technology	CN	

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1 Introduction

This deliverable serves a dual purpose: (1) It provides a detailed description of the procedural and organisational measures implemented to assure high quality of the scientific and outreach-related outputs of the EU-CHINA BRIDGE project, and (2) it establishes an initial risk management plan describing the factors that have been recognised as posing a potential risk for the implementation of the EU-CHINA BRIDGE project activities. This plan also defines the estimated impact of the risks and the means of mitigating them.

The first section describes, on the one hand, the quality assurance mechanisms by the Wuppertal Institute (WI). As the lead beneficiary of the EU-CHINA BRIDGE project, the WI takes the main responsibility for the quality assurance and quality control measures related to the EU-CHINA BRIDGE project. On the other hand, it details project specific quality control procedures implemented with the support of the entire EU-CHINA BRIDGE consortium.

The second part provides an initial analysis of the project implementation risks and outlines corresponding mitigation measures. It also describes the processes for periodic risk monitoring, which will be conducted under the supervision of the EU-CHINA BRIDGE project coordination board.

2 Organisational and Procedural Measures for Quality Control

2.1 Organisational measures for quality assurance and quality control at the WI

The WI is the lead beneficiary of the EU-CHINA BRIDGE project and oversees the project management. In this capacity, the WI is ultimately responsible for establishing thorough procedures for quality control under the EU-CHINA BRIDGE project. The organisational quality assurance and quality control measures implemented at the organisational level will also be fully applied to the EU-CHINA BRIDGE project.

The work of the WI is regularly evaluated internally and externally. The evaluation procedures are used to ensure and maintain high quality standards in research and transfer. The main evaluation criteria are scientific quality, social relevance and research impact. Aspects of scientific quality assurance are embedded in the Institute's project acquisition strategy, its staff development strategy, its information management as well as its doctoral program.

External evaluation: The WI has been regularly evaluated by the German Council of Science and Humanities since 2001/2002. Additionally, an International Scientific Advisory Board conducts an annual review of the Institute's research concept. As part of the Johannes-Rau-Forschungsgemeinschaft (Johannes Rau Research Foundation) (JRF), the Institute's work is further assessed.

Internal evaluation: The WI's scientific management, the Scientific Quality Management and Strategy Development Unit, and the heads of divisions perform internal quality assurance at the Institute. The evaluation criteria are, on the one hand, compliance with the WI's research agenda and, on the other hand, established scientific criteria such as the review procedure, the use of appropriate research methods and statistical evaluation methods.

DFG Guidelines/Cooperation with the University of Wuppertal: On 1 August 2019, the new "Guidelines for Safeguarding Good Research Practice", published by the German Research Foundation (DFG), entered into force. Non-university research institutions such as the WI can join a research institution that implements the DFG Code, thus indirectly acknowledging and adopting the Code (cooperation model). The WI prepared such a cooperation agreement with the University of Wuppertal (BUW).

2.2 Project specific quality control procedures

A crucial aspect of producing high-quality outputs is ensuring they are tailored to the needs of the intended target audience. From the beginning, the EU-CHINA BRIDGE project has focused on clearly defining target audiences for each of its outputs and deliverables. The project primarily targets two main groups: (1) the scientific community and experts, and (2) policymakers and stakeholders in the EU and China. Although the style of presentation will be adapted to suit each audience, consistent quality control procedures will be applied across all EU-CHINA BRIDGE deliverables.

The principal investigator holds ultimate responsibility for the quality of work submitted to the European Commission. However, quality assurance is a collective responsibility shared among the project team, particularly the WP leaders who are members of the project coordination board. Within the EU-CHINA BRIDGE consortium, accountability for deliverable quality is organized hierarchically. At the operational level, task leads are responsible for the quality of their specific outputs, while WP leaders oversee a comprehensive peer-review

process to uphold high content standards. At the management level, the WI will conduct final quality control, with a particular emphasis on the presentation of deliverables.

2.2.1 Quality assurance requirements for publications

Procedural requirements vary between scientific outputs and longer policy reports as well as technology and policy inventories, compared to more immediately policy-relevant formats like policy papers, newsletters, and blog posts.

- ▶ **Deliverables** (academic manuscripts and policy reports, technology and policy inventories):
 - ▶ A preliminary draft of the corresponding deliverable will be ready **one month prior to the submission deadline** of that deliverable.
 - ▶ The draft will be reviewed by at least **one internal reviewer** with relevant (sectoral) expertise who was not directly involved in the preparation of the deliverable.
 - ▶ The **WP leader is responsible for assigning reviewers and overseeing** the review process. Typically, reviewers will include one researcher from within the same WP or one external member from the broader consortium. The coordinator and the project coordination board assist in facilitating the assignment of reviewers.
 - ▶ The initial **review shall be completed within two weeks** in order to reserve sufficient time for corresponding revisions.
 - ▶ The coordinator (WI) will upload and submit the deliverable only after a **final check** of presentation and consistency with the requirements detailed in the work programme.
- ▶ For **Policy Papers** that are based on previous substantive outputs/deliverables a streamlined process shall apply:
 - ▶ A preliminary draft of the policy paper shall be made available **two weeks** before the scheduled publication of the policy paper.
 - ▶ **One researcher** from the EU-CHINA BRIDGE consortium who was not previously engaged in the preparation of the policy paper (or the underlying research), shall review the draft within one week.
 - ▶ For policy papers that are not based on substantive research that is otherwise subject to internal quality control procedures, the same requirements apply as for deliverables.
- ▶ For **newsletter and blog posts** the following internal procedures apply
 - ▶ Newsletters and blog posts will be reviewed internally by **at least one member of the dissemination and communication WP** who was not otherwise involved in the preparation of that text and by the project coordinator.

2.2.2 Quality assurance for events and other outreach activities

All project outreach activities will be based on a detailed Communication, Dissemination and Exploitation (CDE) plan that is developed within the first six months of the project. The CDE plan will detail the target groups of the project and list different channels and promotional means to reach these target groups, such as relevant events, publications, websites, social media, and synergies with other EU projects or networks. The strategy will also define indicators for monitoring dissemination and communication activities and define ways to monitor the project's performance in these indicators, such as social media use, content creation, and number of policy briefs and scientific articles that are published. Lastly, it will define ways in which our consortium can follow relevant research and novelties in the field. The strategy will be revised once a year, after each monitoring cycle, to change or improve activities where we see that the targeted goals for indicators have not been achieved.

3 Risk Management

3.1 Initial Risk Assessment

In cooperation with WP leaders and sectoral leads, the WI will be responsible for the quality control of the project and ensure a high quality of all deliverables. The WI is also responsible for a risk management strategy and contingency planning. In collaboration with partners involved in quantitative analysis, a data management plan will be developed to ensure data access and interoperability, data sharing and re-use beyond the project duration and back-up and long-term storage.

Table 1 Risk assessment and management

Description of risk (i) likelihood, and (ii) severity	WPs	Proposed risk mitigation measures
Delay/lack of inputs needed between WPs (i) low-medium (ii) high	1-7	The Project Coordination Board will meet monthly to discuss progress on WPs, Tasks, Deliverables and Milestones, which allow the consortium to identify delays early on and take remedial actions.
Deliverables of low-quality deliverables: (i) low (ii) high	1-7	In cooperation with WP leaders, WI and Tsinghua-SA will be responsible for the quality control of the project and ensure a high quality.
Limited engagement of stakeholders in co-creation: (i) Low (ii) medium high	1,3-7	Partners have closely worked with most identified stakeholders in different contexts and have extensive experience in engaging key stakeholders.
Lack of access to data for emissions inventory and modelling: (i) Low (ii) medium	3-6	A list of potential data sources has already been identified and will be further developed; the partners will use alternative data sources in case of a lack of access to primary databases.
Lack of coordination and collaboration between the European and Chinese partners (i) medium (ii) high	1-8	The project will benefit from already existing and long-lasting collaboration between the Chinese and European project partners. The Project Coordination Board, consisting of both EU and Chinese partners, will develop effective exchange and collaboration mechanisms at the project outset and meet regularly to mitigate any issues and discuss strengthening collaboration. The project

		coordinator from the EU side is Chinese, so she is familiar with both working cultures and will facilitate the communication.
Language barriers for EU-China stakeholders communication (i) low (ii) high	1,6,7	All EU-China joint events will have simultaneous translation. Policy brief used will be translated into Chinese.
Underestimation of costs for events and travels (i) low-medium (ii) low	1, 7	In case costs have been underestimated (or that there is unforeseen rapid inflation over the next 3 years, which is very unlikely), we would take one of the following measures, (in the following order to minimise the effect on the value of the events): (i) move events to lower-cost venues; (ii) convert selected events to virtual meetings; (iii) shorten the duration of events; (iv) decrease the number of participants and invited speakers.
Conflicts between partners (i) low (ii) high	All	The careful design of the Consortium Agreement, with clear provisions on relevant issues regarding project work, task allocation, finances, administration, knowledge management, etc., will help to avoid conflicts. Discussion and debate within the consortium will occur at project meetings, workshops, in the Project Coordination Board, and on an on-going basis via email and phone calls. Should a serious conflict arise, the coordinator will discuss remedial measures with the partner(s) concerned, seek assistance from other partners, or, in extreme cases reallocate the work amongst the other partners. In the event that the conflict involves the Project Coordinator, or the problem cannot be resolved in dialogue, a meeting of the full Project Coordination Board and Project Officer would be called to make a final decision.
Key staff leave midway through project (i) medium (ii) medium	All	All partners are sizeable, well-established institutions with adequate capacity and resources. New staff can be recruited and effectively trained. The project coordinator and WP leaders will have deputies to ensure a smooth transition in case one of them leaves.

3.2 Continuous Risk Monitoring

The list of project implementation risks mentioned above has also been integrated into a project management Excel tool. This tool will be used by the project coordinator and the coordination board to monitor implementation progress, identify new risks, re-assess previously identified risks, and implement appropriate mitigation measures. This approach ensures timely and high-quality delivery of project outcomes.