# **Rock Environment and Energy Institute**

2023 Annual Report



# CONTENTS

1.	Basic Information	. 3
2.	Institution-building	. 4
3.	Project activities and outputs	5
4.	Financing and expenditure	. 8
5.	Acknowledgements	.9

### 1. Basic information

Beijing Shunyi District Granite Environment and Energy Research Centre (REEI, a private non-enterprise unit registered with the Civil Affairs Bureau of Shunyi District, Beijing in April 2018, with the Shunyi District Science and Technology Association as the institution's business guide), formerly known as Granite Environment and Energy Research Institute (REEI), was founded in July 2012 as an independent think tank for researching environmental and energy policies. We are an independent think tank on environmental and energy policy, focusing on policy analysis of the energy transition, and discussing how to accelerate the low-carbon transition of China's energy system while taking into account social equity, climate change, environmental quality, and public health, and we hope to promote multiparty participation, openness, and rationality in the policy discussion in the process.

# 2. Institution-building

### 2.1 Convening of the Council

During the year, the agency held three board meetings on 9 June, 14 June and 6 November 2023, at which the members of the board communicated and voted on matters related to the development of the agency in accordance with the agency's bylaws.

The Third Council adopted the following important resolutions:

- Our organisation has entered into a strategic cooperation agreement with Beijing Green Partnership Consulting Ltd. to support the work of the Institute for Green Innovation and Development (iGDP).
- The content of the institution's statutes has been updated in accordance with the requirements of the competent bodies.
- Adoption of the request of Zhao Ang and Lin Jiaqiao to step down as council members. Adopted the resolution that Han Wenke and Hu Min are members of the Second Council.
- Determine the updated residence of this unit to Room 2201-16, 2nd Floor, Building 1, No.118 Courtyard, Nanfaxin Street, Shunyi District, Beijing, P.R. China.

# 3. Project activities and outputs

Project name	outputs
A Comparative Study of Microgrid Development Models in Eastern and Western Regions	In 2023, the project conducted pilot studies on microgrid projects in Qingdao and Xi'an, through which it understood the current situation and typical development models of local microgrids, clarified the technical problems and policy barriers to the development of microgrids, and grasped the expectations of various investors for microgrids. 2024 will continue to carry out in-depth studies on microgrids in these two regions, summarise the experiences and lessons learned from microgrid development in these two regions, and make policy recommendations to the local governments. In 2024, we will continue to conduct an in-depth study on the microgrid development models in the two regions, summarise the experiences and lessons learned from the development of microgrids in the two regions, sort out the policy measures to promote the sustainable development of microgrids in the two regions, and put forward policy recommendations to the local governments.
Synergistic Development of Industrial Development and Local Consumption of Renewable Energy in Northwest China	In 2023, the team has reviewed all the important energy and industrial documents issued by the state for the Northwest China region, clarified the main problems of industrial transformation and upgrading in the Northwest China region, and explored the opportunities and challenges of developing renewable energies under the dual-carbon target for the development of the Northwest China region. 2024 will continue to explore the new model of synergistic development between industrial upgrading and renewable energy in the Northwest China region, summarise the successful experiences and make policy recommendations to the central and local governments. In 2024, we will continue to explore the new mode of synergistic development between industrial upgrading and local consumption of renewable energy in Northwest China, summarise the successful experience and put forward relevant policy recommendations to the central and local governments.
Study on non-road mobile machinery	In 2023, the project "Research on Green and Low-Carbon Development Path of Non-Road Mobile Machinery" has analysed and assessed the fuel consumption and carbon emission of high-energy-consuming and high-emission non-road mobile machinery, and explored the potential of non-road mobile machinery for improving energy efficiency, electrification and the application of alternative fuels, so as to

	provide basic research support for the formulation of relevant standards on energy consumption and carbon emission for non-road mobile machinery by the state and the industry. It has explored the potential of non-road mobile machinery for improving energy efficiency, electrification and the application of alternative fuels, and provided basic research support for the formulation of national and industry standards related to energy consumption and carbon emission of non-road mobile machinery.
"Salon Series on "Transformation and Development of China's Electric Power under the New Circumstances	The three videos and opinion articles of the salon series "China's Power Transition and Development under the New Circumstances" have been well disseminated. The three videos were disseminated on Peking University Energy Institute, Peking University Energy Institute Climate Change and Energy Transition Programme, China Energy Net, Farewellcoal, Energy Think Tank (the official WeChat of Carbon Neutral Development Research Institute of Hunan Institute of China National Energy Construction Corporation) and other micro-channels, and the number of video broadcasts and article readings exceeded 20,000, attracting widespread attention from all walks of life.
Renewable Energy for Green Development in the Beltway Countries, second quarter of the salon series China Renewable Energy Development Initiative Project	In August 2023, the second season (six levels) of the "Renewable Energy for Green Development in Belt and Road Countries" Salon Series was officially launched, bringing together industry experts to give exciting lectures and comments, focusing on renewable energy for green and low- carbon development in countries along the "Belt and Road". The China Renewable Energy Development Initiative (CREDI) project, officially launched in December 2023, was initiated by think tanks, enterprises, industry associations, non-profit organisations, foundations and other relevant organisations, with the aim of strengthening the collaboration of various stakeholders in China's renewable energy sector, and to promote the achievement of the multiple goals of renewable energy development at home and abroad.
Research Project on Total Coal Consumption Control in China Research Project on Total Oil Consumption Control in China	Study of sustained control of coal consumption nationally, locally, and in key energy consuming industries. The final report will be developed by integrating the second phase of the study. To study the sustainable control of oil consumption at the national level and in key high oil-consuming sectors, including the transport sector, the petrochemical and chemical industry, and the non-road mobile machinery sector. The project aims to study how to reduce oil consumption, enhance China's energy security, and help China achieve the "dual-carbon" goal as soon as possible.

	Policy recommendations will be submitted to the Development and Reform Commission, the Energy Bureau and other relevant ministries and commissions.
Research on Emission Reduction Policies and Practices in Agri- food Systems and Strategy Dissemination Project	Conduct research on best practices in reducing emissions along the entire chain of China's agri-food system, summarise effective approaches to municipal solid waste management, especially the optimisation of the food waste chain from generation to disposal, and conduct publicity and advocacy campaigns for the public to reduce food waste. Tracking the progress of low-carbon actions in China, summarising best practice cases, and facilitating the exchange and sharing of successful experiences of climate change actions in the industry; disseminating climate change knowledge to the public, and facilitating the formation of a social consensus on the implementation of climate action.
China's Provincial- level Regional Green Transition Performance Assessment Programme	Develop a framework for assessing the performance of China's provincial regions in green transformation, collect relevant information that can be used for assessment based on the indicators identified in the above framework, collect cases of good practices in transformation at provincial level, analyse and summarise the policy and technology gaps in green transformation at provincial level, and put forward relevant policy recommendations.

## 4. Funding and expenditure

#### 4.1 Sources of funding

The total project funding for the Granite Environment and Energy Research Centre in 2023 is RMB **14,859,706.10**. The major funders are Children's Investment Foundation (UK) Beijing Representative Office, Rockefeller Brothers Fund (US) Beijing Representative Office, Peking University, Natural Resources Defense Council (US) Beijing Representative Office, etc.

#### 4.2 Expenditure of funds

Total expenditures for 2023 were \$13,178,915.16, with employee compensation making up the largest expenditure category, accounting for \$5,067,973.17 of total expenditures, followed by subject matter consulting fees, and office expenses.

### 5. a thank-you note

2023 is the first year in which the agency has completed its organisational changes to usher in major growth. This year, we completed the turnover of the agency's new Board of Directors, while the agency's funders and programmes grew substantially.

In 2024, we will further improve the organisational governance of the organisation, form an expert steering committee, define the strategic plan for the next development of the organisation, and bring the organisation to a new stage of development, so as to contribute our strength to the global climate governance and China's energy transition.

We would like to thank the Rockefeller Brothers Fund (U.S.) Beijing Representative Office, Beijing Green Partners Consulting Co. We would like to thank the organisations and organisations that have supported our activities this year! We would also like to thank the Shunyi District Science and Technology Association of Beijing, which is Granite's business advisor, for their guidance and advice!