

Rock Environment and Energy Institute

2019 Annual Report

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1. Introduction

Rock Environment and Energy Institute (REEI), founded in July 2012 in Beijing and registered as non-for-profit organization in Shunyi Bureau of Civil Affairs in April 2018, is an independent think tank working on environment and energy policy research. We focus on energy transition policy and discuss how to achieve a low-carbon transition of China's energy system and formulate the policy analysis from three significant pillars, social justice, environmental sustainability and public health, aimed to promote multi-party participation and open-minded policy debates.

Vision

We are devoted to promoting the establishment of environmental policymaking mechanism based on procedural justice and critical reasoning, so as to make our society more inclusive, just and sustainable.

2. Project Summary

In 2019, REEI's work is mainly carried out in accordance with the strategic topics, with energy transition policy discussion as the main line, climate-smart health care and regional cooperation on energy transition and carbon pricing as the cornerstones, taking health and air pollution into consideration.

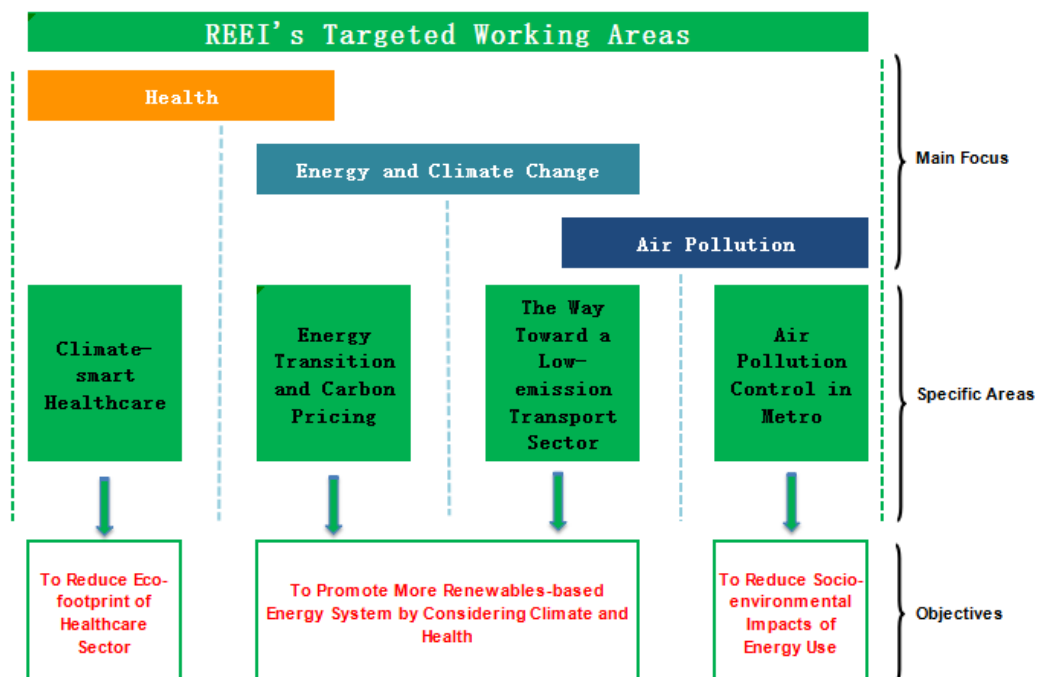


Figure 1: REEI's Targeted Working Areas

2.1 Energy Transition and Carbon Pricing



Figure 2: REEI went to South Korea for exchange activities

China lacks a policy environment to discuss the sustainability of carbon pricing around economic development, environmental protection and social justice, that is, how to integrate economic, environmental and social considerations into the decision-making of carbon pricing. In 2017, under the support of the Bread for the World-Protestant Development Service (German), REEI implemented the Energy Transition and Carbon Pricing (ETCP) Project, which has attracted domestic and international attention to the sustainability and effectiveness of China's carbon pricing.

During 2018-2021, in collaboration with the China Association for NGO Cooperation (CANGO), REEI has integrated the discussion on energy into the project and carried out the ETCP Project with the support of German side. The goal is to establish a wide-range regional cooperation platform, promoting the technology and policy exchange related to energy transition and carbon pricing through the effective participation of expert groups, and then providing valuable suggestions for the rational formulation of regional energy and climate change policies.

Project Progress

Table 1: Progress of ETCP projects in 2019

Time	Progress
In April	The project team participated in the C20 summit held in Tokyo, Japan, and listened to the speeches of non-governmental organizations in different fields from various countries. During this period, they visited and investigated many Japanese institutions, introduced the ETCP Project and discussed the possibility of future cooperation.
In May	The ETCP Project website on the REEI's official website was launched.
In July and August	The project team went to South Korea and Mongolia to visit environmental NGOs, think tanks and research institutions there, listening to their work and research on energy and climate change issues and deeply introducing ETCP Project. REEI signed memorandum of understanding (MoU) with Energy and

	Climate Policy Institute (South Korea) and Mongolian Renewables Industries Association (Mongolia) respectively, aiming to promote further cooperation and exchange for both sides.
In November	REEI completed the policy brief titled " Carbon Pricing in China, Japan and South Korea ".
In December	Project dissemination at the United Nations Climate Change Conference (cop25) held in Madrid, Spain.
In the whole year	Five issues of ETCP Project newsletters were edited and published throughout the year (subscribable). The newsletters mainly include latest news and research reports on energy transition and carbon pricing; Three articles related to carbon pricing were published on REEI's WeChat, including revenue use of China's carbon pricing, auction revenue use of global carbon emission trading system, and carbon market mechanism of Article 6 under the Paris Agreement.

2.2 Climate-smart Healthcare



Figure 3: 2019 Healthcare Sector Sustainable Procurement Forum

Healthcare sector plays a key role in tackling the health problems caused by climate change, but at the same time, the energy consumption and pollutant emissions of the sector in the operation process also produce environmental impacts resulting in direct and indirect public health burden. To promote the development of climate-smart healthcare, reducing the carbon emissions of the healthcare sector and improving the sector's climate resilience, will play an important role in mitigating and adapting to global climate change. REEI's Climate-smart Healthcare Program aims to promote the green and low-carbon transition of China's healthcare sector, and promote health sector's participation in climate change policy discussions. The program currently includes three major projects: the Global Green and Healthy Hospitals, Sustainable Health in Procurement Project and hospital cooling energy efficiency project.

Project Progress

Table 2: Progress of Climate-smart Healthcare in 2019

Time	Progress
In June	REEI jointly organized the "2019 Healthcare Sector Sustainable Procurement Forum" in Nanchang with the "Chinese Hospital Architecture and Equipment" and Green Hospital Committee of China Association of Building Energy Efficiency.
In June and July	For developing the Sustainable procurement evaluation guidance for healthcare institutions, REEI and China Environmental United Certification Centre jointly organized several hospital interviews to learn the hospitals' procurement process and management policies.
In August	REEI and the National Institute of Hospital Administration reached a cooperation agreement to conduct research on polyvinyl chloride infusion devices and disinfectants in hospitals to understand the current status of the products' use and management, as well as feasible alternatives.
In October	The project partner, China Environmental United Certification Centre, completed the draft of the Sustainable procurement evaluation guidance for healthcare institutions, and an expert consultation meeting was held in Beijing. A total of 6 experts from hospitals and standards development, and 4 members of the project implementation team participated in the meeting.
June to December	Since June, REEI started to implement the "Hospital air-conditioning system energy audit and energy saving demonstration project" which is supported by the UNDP GEF Small Grants Program. In September, the project's energy audit team started to carry out energy audit for two buildings' air-conditioning systems of Fudan University Huashan Hospital. In November, REEI project team went to Shanghai to learn the project progress and exchange ideas with the audit team and the Hospital on energy efficiency improvement plan. The audit team completed and submitted the audit report in December.

2.3 The Way Toward a Low-emission Transport Sector



Figure 4: REEI organized an expert seminar

In the past two decades, with the increase of car ownership, the consumption of fossil fuels in the transport sector and the greenhouse gases emissions from vehicles have greatly affected China's environmental and economic development. In 2019, we launched a research project on China's energy transition with the theme of low-emission transport, with the support of the Heinrich-Böll-Stiftung, Beijing Representative Office.



Figure 5: REEI released project report at COP25

This project is planned for the three years, from 2019 to 2021, aimed at establishing a regional expert group to promote policy exchanges on low emission transport by integrating climate and health assessment into it. After the completion of the project, the policy recommendations for low-emission transport strategy will be provided for the policy makers in China and other targeted countries.

Project Progress

Table 3: Progress of The Way Toward a Low-emission Transport Sector projects in 2019

Time	Progress
In April	The project team visited Japan to understand the current status of Japan's low-emission transport decision-making.
In October	The project team completed the energy review report which is concentrated on low-emission transport sector, through multiple perspectives and targeted research analysis on sustainable urban transport, the impact of traffic pollution on health, and China's low-emission transport policy.
In November	REEI successfully held an energy review report seminar in Beijing to exchange and discuss the report content with experts in the field. This conference was reported by many mainstream media such as Caixin.com, environment and life.
In December	REEI officially released the full version of "Environmental Review 2019" at COP25 in Madrid and conducted in-depth exchanges with domestic and foreign media participating in the conference.

2.4 Air Pollution Control in Metro: Promoting Beijing Metro to Implement Air Quality Management



Figure 6: Invited by Beijing Metro to conduct on-site investigation

We focus on how to control air pollution in Beijing metro, aimed to propose practical policy suggestions on air quality management in metro for Beijing MTR Corporation through visiting Hong Kong, Seoul and Taipei to learn their experiences of metro air quality management.

Project Progress

Table 4: Progress of Air Pollution Control in Metro in 2019

Time	Progress
In March	Based on understanding of the project output, Beijing MTR Corporation Limited contacted us to introduce the metro air quality management facilities and methods. REEI project team also introduced the main factors affecting the air quality in the metro and gave suggestions on how to improve it.
In July	After the implementation of the "Indoor Air Quality Control Law" in South Korea, the project team visited South Korea to exchange and learn, and further improved the report "Experiences for Improving Ambient Air Quality: From Hong Kong, Seoul to Beijing, Shanghai".

3. Outcomes

3.1 Seminars and training

REEI organized many workshops and sharing sessions, and invited many well-known experts and scholars at home and abroad into discussions.

Table 5: Details of activities in 2019

Date	Events
June	REEI and the Chinese Hospital Architecture and Equipment and Green Hospital Committee of China Association of Building Energy Efficiency jointly held the "2019 Healthcare Sector Sustainable Procurement Forum ". The forum shared experience

Date	Events
	from three aspects: construction of sustainable procurement system in healthcare sector, management of hazardous chemicals, and energy conservation and carbon emission reduction. More than forty representatives from international organizations, health institute, environmental standards research institute, green hospital association, hospitals, enterprises and media attended the forum.
October	The 5th Green Hospital Asia Conference co-organized by HCWH (SEA) and Khoo Teck Puat Hospital was held in Singapore. REEI representatives shared and exchanged ideas with over 200 participants from hospitals, environment and health institutions from all over the world on the topics of climate change and healthcare, waste management, sustainable food, energy and so on.
November	REEI organized the Energy Review 2019 report seminar in Beijing with the support of the Heinrich-Böll-Stiftung Beijing Representative Office . This seminar focused on the low-emission transport in China, and hope to discuss the report content with experts, scholars and professional media through this seminar, and further improve the content of energy review.
December	REEI Project Team participated in COP25 in Madrid, Spain and officially released REEI “Energy Review 2019”.

3.2 Research Outcomes

- Energy Review 2019

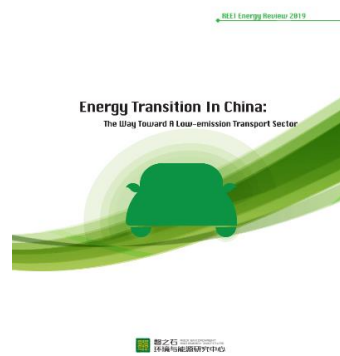


Figure 7: < REEI Energy Review > cover

[Report reading link](#)

Since 2015, REEI has released “REEI Energy Review” for 4 consecutive years. Throughout four years, the expert group has analyzed China's energy transition issues and provided independent and in-depth insights into China's energy and climate change policies. In the past two decades,

with the increase of China's car ownership, the consumption of fossil fuels in the transport sector and the greenhouse gases emissions from vehicles have greatly affected China's environmental climate and economic development.

In 2019, REEI turned the focus of energy transition into low-emission transport sector. Using the research experiences in the past four years on energy transition, carbon pricing and clean air policies, REEI shared the results of case study analysis and insights of China's low-emission transport in the form of "Energy Review", aimed at promoting the energy transition in transport sector in China.

- **Environmental Review 2019**



Figure 8: <REEI Environmental Review> cover

[Report reading link](#)

In 2019, REEI has continued to pay attention to the fields of energy policy, carbon pricing, environment and public health, and published a number of analysis and comment articles related to the above issues, sharing the actions and experiences of countries we have observed in climate change, and contributed to a number of environmental areas including carbon pricing and public environmental health impacts. At the end of the year, we have compiled the articles published this year into the "Environmental Review 2019". We hope that this report can exchange and communicate with our colleagues working in the environmental field and the public concerned about climate change, promoting multi-party participation and rational communication.

3.3 Reviews and analytical

REEI focuses on expressing independent analysis and perspectives on important environmental and energy issues in China. Many traditional media and new media have reproduced or quoted

the articles of REEI. We have also updated the comment columns such as Caixin.com, and reached long-term contribution relationships with China Low Carbon Network and China Carbon Trading Network. In addition, we are exploring new ways of Internet communication, trying to post comments and analysis in the form of short videos.

4. Funding and Expenditure

4.1 Funding sources

REEI's total project funds for 2019 was RMB 1,361,875, among which funds received from foreign foundations and development institutions were RMB 738,218, and domestic financial contributions accounted for RMB 623,657 of the total. The main donors are CANGO (China Association for NGO Cooperation), Heinrich-Böll-Stiftung Beijing Representative Office, UNDP-GEF-SGP, and other institutions.

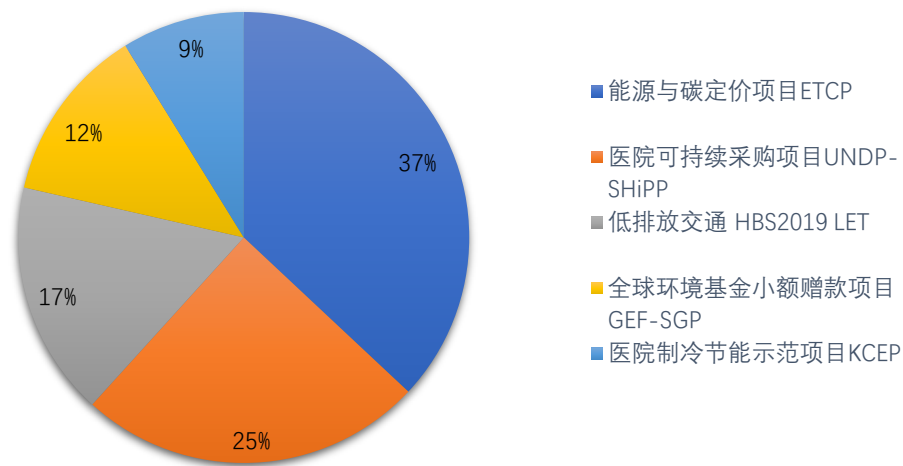


Figure 9: Project Funds of REEI in 2019

4.2 Expenditures.

Total expenditures for 2019 was RMB 1,277,783, among which staff salary and social benefits constituting the majority of the expenditure in 2019, around RMB 538,012 of total, followed by project travels and taxes. (all expenditure numbers are from project record, not yet audited)

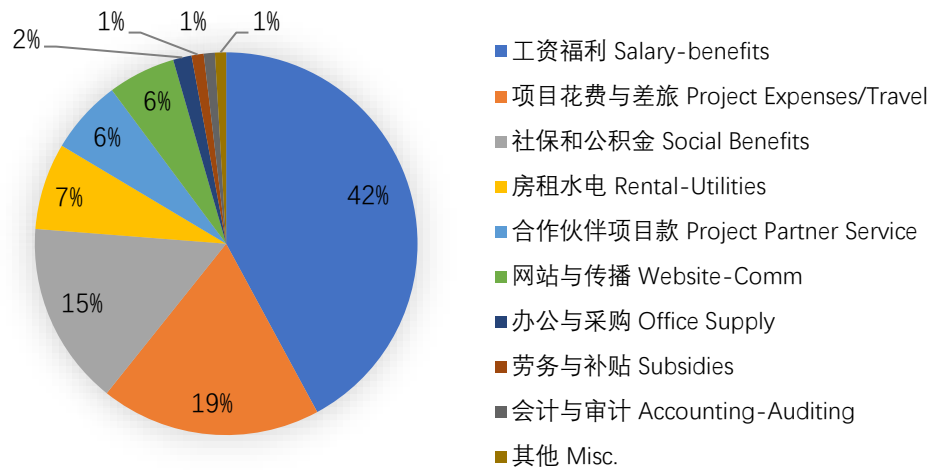


Figure 10: Expenditure of REEI in 2019

5. Conclusion

In 2019, REEI was on track to become an influential think-tank on energy and environmental policy in China. We produced in-depth policy analysis and review papers, promoted public policy discussion and raised public awareness. The report published by REEI has gradually begun to play a significant role in relevant policy discussions. Our professional capacity in policy research was further strengthened in 2019.

6. Acknowledgement

We hereby appreciate the support from Heinrich-Böll-Stiftung Beijing Representative Office, Bread for the World-Protestant Development Service, China Association for NGO Cooperation and other institutions. Thanks also to REEI's guidance organization, Beijing Shunyi District Association of Science and Technology, for their thoughtful guidance and valuable opinions on the development of our organization.