

Mobilizing the multiple benefits of renewable energies in China

Building new alliances – seizing opportunities – raising climate ambitions



8 Key conclusions

The expert roundtable organized by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Institute for Advanced Sustainability Studies (IASS) brought together 25 eminent thinkers to address options to spark political momentum for seizing the opportunities linked to renewable energies and climate change mitigation in China.

The experts from China, Germany and the USA explored how China's transition to the new energy world unravels longtime trade-offs between economic, social and environmental interests and how China's increasingly leading role in international climate diplomacy translates back to immediate opportunities for domestic development and welfare.

1) Joint Chinese and German climate leadership could put social and economic co-benefits center stage (UNFCCC, G20).

China and Germany are united by their pivotal position as international climate policy leaders and by their experiences in seizing the opportunities of the new energy world based on renewables. In joint leadership both countries can bring forward the narrative of multiple social and economic opportunities and convene an international alliance for mobilizing the co-benefits of climate change mitigation in the context of UNFCCC and G20.

2) Mobilizing co-benefits for action, connecting opportunity with interests.

Knowledge on the co-benefits of renewable power generation in China is growing, with several reports being ready for publication. Political ownership and buy-in into co-benefit assessment as well as connecting identified opportunity with specific interests are key to mobilize these opportunities for action and to convince policy makers that it is in their own interest to seize the co-benefits of renewable power generation.

3) Co-benefits beyond electricity: expanding the opportunity perspective to renewable mobility, heating and cooling, industrial production and energy efficiency

Notwithstanding the high pace of renewable energy deployment in China's electricity sector, the transition of China's whole energy sector – in particular mobility/transport, heating and cooling, industrial production, opportunities of decentralized energy systems and energy efficiency – has only started to pick up speed. Many social and economic opportunities of China's energy transition as well as inter-sectoral synergies so far remain unexplored.

4) Whose benefit? Spotlight on the social performance of renewable energies.

Renewable energies are already used in socio-economic and rural development strategies in China, including recent solar PV pilot projects. However, important social implications of China's energy transition require additional attention, such as working conditions/job decency (in renewable versus coal industries), consumer's willingness to pay for green energy as well as distributional effects of socio-economic benefits.

5) Close-up on regions: seizing co-benefits requires understanding, visions and alliances on the regional and local level

Main implications of China's energy transition – including benefits and burdens of different energy industries such as value creation and air pollution – are being experienced largely on the local level. Climate and energy policies need to connect to the level of provinces and regions. Regional co-benefit assessment (regional case studies) allows to link specific context-sensitive analyses with interests of stakeholder to drive the energy transition on the regional level.

6) Social and economic co-benefits of climate change mitigation and renewable energies need to be considered along with the enabling political environment to seize the opportunities

Existing barriers to renewable energy deployment in China, i.e. resulting in extraordinary curtailment rates, to date inhibit seizing the full potential of China's energy transition. Besides working towards reducing these barriers, domestic climate and energy policy – e.g. investment incentives or social policy – can continue building the enabling environment for social and economic co-benefits of renewable energies on national and regional levels.

7) Call for reliable, transparent and universally applicable toolkit for co-benefits assessment

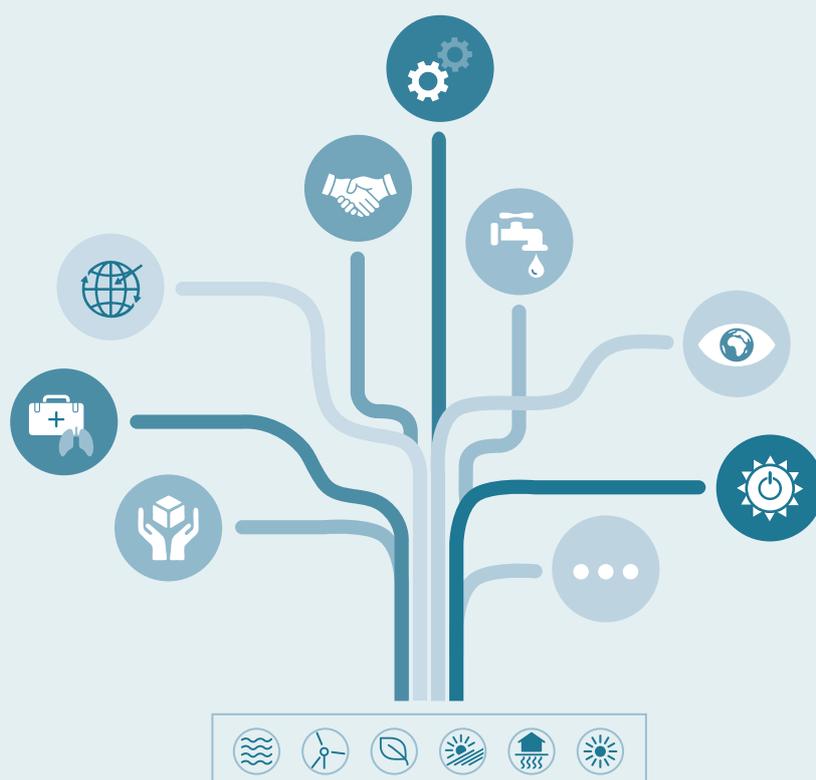
To date, internationally recognized and standard methods to calculate social and economic co-benefits of climate change mitigation and renewable energy deployment are still to be developed. An applicable toolkit should build around scientifically sound net analyses to balance wins and losses e.g. in the job market, and should connect transparent and easy to apply modelling with empirical data, including evidence from regional case studies.

8) Translating science best language into policy best language (and vice-versa).

Connecting opportunities with specific interests to mobilize the social and economic co-benefits involves a target group oriented communication and language. Finding a common language represents an important prerequisite to jointly set up co-benefit assessments with policy makers and knowledge partners, increasing ownership, applicability, and importantly, the impact of co-benefit assessments by feeding into policy formulation.

Guiding questions for the GIZ-IASS Expert Roundtable

- I. Identifying key benefits of renewable energies in China: what do we know, what do we need to know?
 - II. How to continue building the enabling environment to seize the opportunities of the new energy world in China?
 - III. How can public sector, research, international cooperation and the private sector collaborate to mobilize the multiple benefits of renewable energies in China?
 - IV. How can the multiple benefits of renewable energies be used more effectively to convince decision-makers to take action for energy sector decarbonization?
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List of roundtable experts

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| Song Sha 宋莎 | World Economic Forum – Global Agenda Council on China |
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Organization and facilitation



The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) provides services worldwide in the field of international cooperation for sustainable development. GIZ has over 50 years of experience in a wide variety of areas, including economic development, energy and the environment. GIZ has been supporting China's reform and development process on behalf of the German Government for more than 30 years, reflecting China's changing needs and role in the world.

The Institute for Advanced Sustainability Studies (IASS) Potsdam was founded in 2009 as independent research institute for the purpose of gathering together all relevant forms of knowledge from science, society and politics in order to initiate and support a transformation towards sustainable development that is grounded in scientific research. Currently around 100 researchers from over 30 different countries are working at the institute on projects that span the humanities and the natural and social sciences.

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