



EFD

ANNUAL  
REPORT

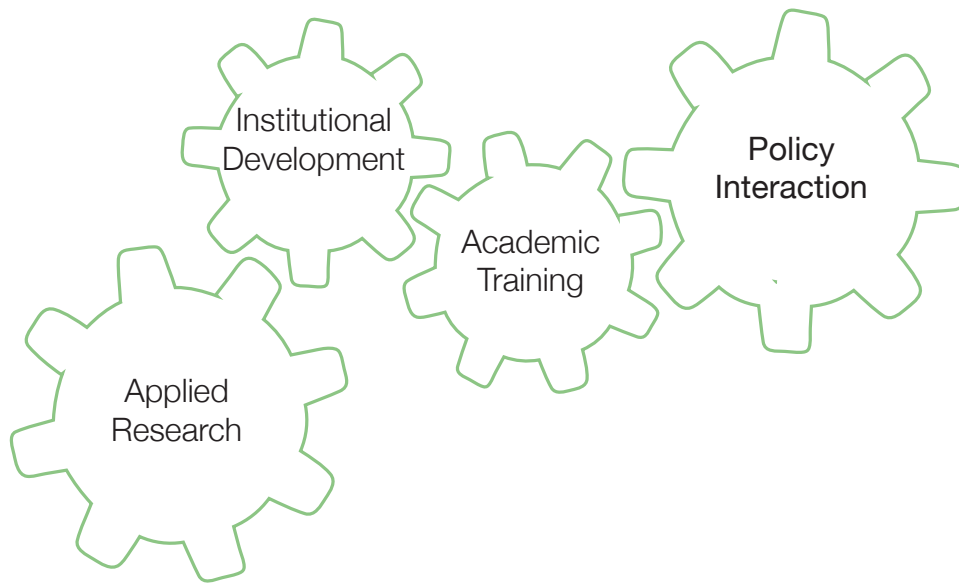
China  
2017



# Environment for Development

The EfD Initiative is a global network of environmental economics' research centers.

We contribute to effective management of the environment in the global south through:



## CONTENTS

P3. Director message

P4. Research

P5. Collaborative Research Programs

P6. Policy Interaction and Communication

P7. Academic Capacity Building

## Director message

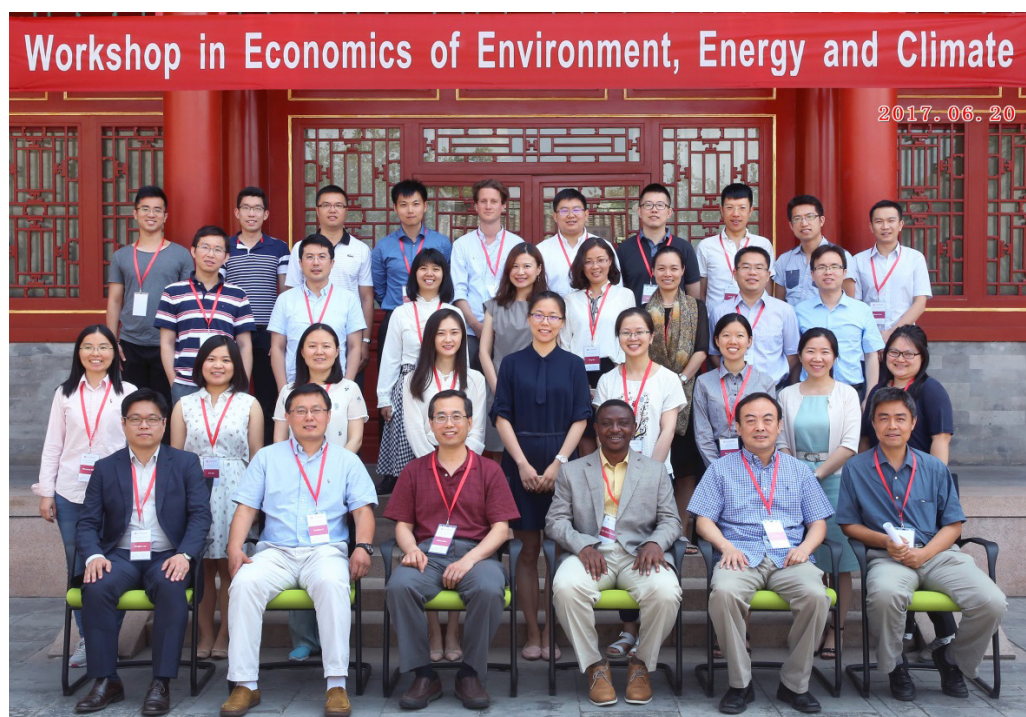
In 2017, EfD China has continued to work towards its overall objective, which is to improve the well-being of disadvantaged groups in developing countries by mitigating excessive pollution and natural resource depletion, and to promote sustainable use of natural resources and ecosystem services by means of environmental policy instruments. This objective has been actively pursued through vibrant research, policy informing processes, and capacity building activities.

In 2017, EfD China published 35 scholarly articles in high-ranked academic journals. In addition, we successfully accomplished several research projects, giving rise to a number of working papers which are in the pipeline. These achievements herald an even more productive 2018.

Further, in the past year we continued to contribute to China's environmental economic policy making through policy briefs and policy workshops. For example, our

policy brief on China's subsidy policies for renewable energy was submitted to the State Council, and was considered and commented on by the Vice Premier. Many subsequent developments in these subsidy policies were in line with our recommendations. Moreover, we delivered presentations to senior policy makers in three policy workshops, concerning institutional reforms of eucalyptus farming in China's subtropical regions, Beijing's transport policies, and China's environmental taxes and carbon emissions trading scheme. Our presentations attracted considerable interest from policy makers and academics.

Academic capacity building is another important front of EfD China. In 2017, one of our post-doctoral research fellows secured a faculty position at a top university in China. A doctoral candidate, jointly supervised by EfD Sweden and EfD China, successfully defended her thesis and obtained her PhD degree.



*EfD China's group appearance in the PKU-NSD Workshop in Economics of Environment, Energy and Climate, Beijing, June 2017*

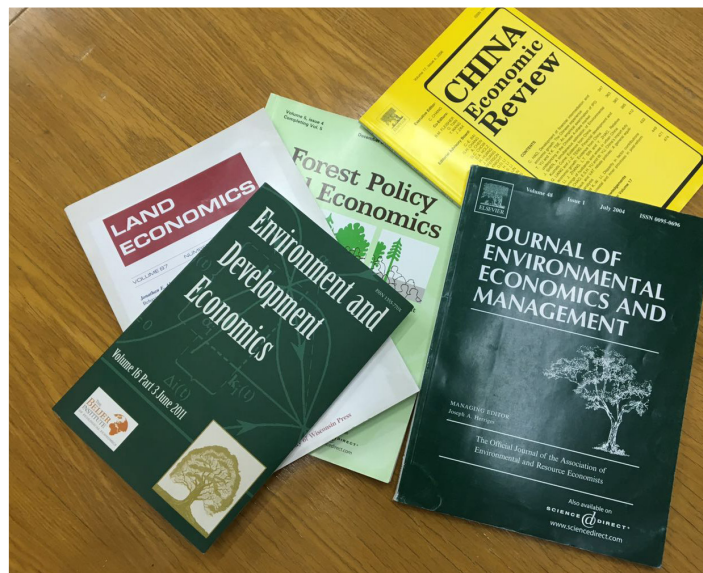


# Research

Our research activities and outputs mostly concern four broad themes, namely forestry, energy, transport, and climate change. These themes have been scheduled as top priorities on China's agenda of environmental protection and rural development.

In 2017, EfD China published 35 scholarly articles in peer reviewed academic journals. Many of these articles are published in top academic journals, such as the *Journal of Economic Dynamics and Control*, the *Journal of Environmental Economics and Management*, *Nature Energy*, and *Energy Economics*. In addition, we successfully accomplished several research projects, giving rise to a number of working papers and policy briefs. These projects delved into the socio-economic impacts of China's Three North Shelterbelt Program (Green Great Wall), the effects of Beijing's driving restrictions and investments in public transport infrastructure on mitigating traffic congestion and air pollution, an evaluation of ecosystem services provided by forests, price elasticity of shale gas supply, outcomes of the pilots of China's carbon emissions trading scheme, and cooperation behavior and informal social institution in rural irrigation canal management, amongst others. These working papers were presented in high-quality academic

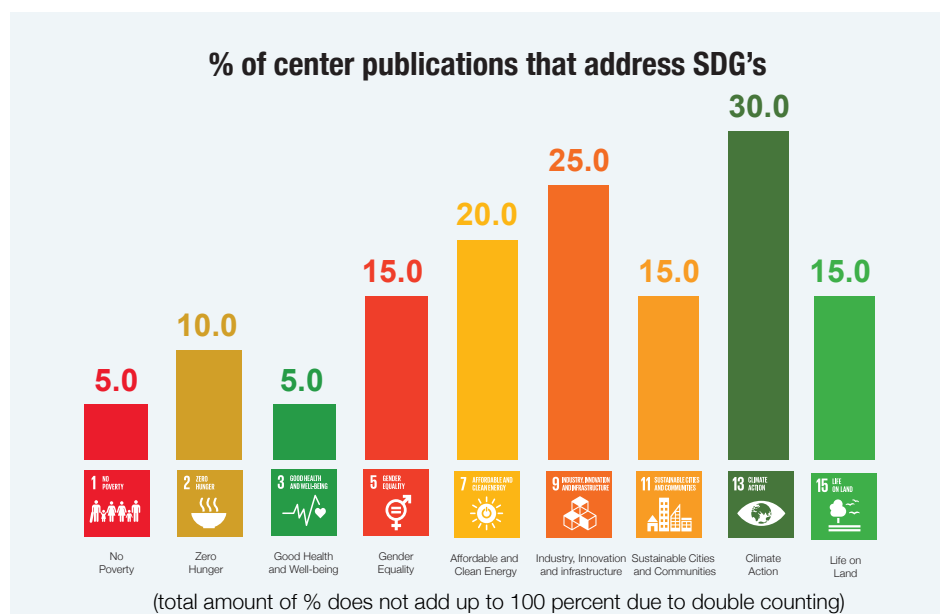
conferences, and were considered highly publishable in leading field journals. They have been lined up to add to the quality and quantity of our publications in the forthcoming year.



Examples of academic journals that published EfD China's scholarly articles.



27 Publications in 2017  
17 Peer reviewed publications



## Collaborative Research Programs



*Ecosystem Services Accounting for Development researchers at the 2017 workshop in Addis Ababa, Ethiopia*

EfD has institutionalized south-south-north experience sharing through the research collaborations. The Sustainable Energy Transition Initiative (SETI) network, the Forestry Collaborative, and the Ecosystem Services Accounting for Development (ESAforD) that apply the “Community of Prac-tice” approach have been very active during 2017. SETI organized a big workshop at Duke in May 2017 with more than 70 practitioners. Similarly, the forestry collaborative organized a meeting back-to-back with the EAERE annual conference in Athens in June 2017.

All collaboratives had meetings during the EfD annual meeting in Addis, Ethiopia in October. We now start to see the outcomes of these collaborations. There is increased learning between centers, and increased joint participation in various international meetings etc. We expect to see much more impacts in the years to come while these collaborations continue to mature.

*Sustainable Energy Transition Initiative Program leader  
Subhrendu Pattanayak presenting at EfD's 2017  
Annual Meeting in Addis Ababa, Ethiopia*





# Policy Interaction and Communication



EEPC researcher Professor Jintao Xu presenting research findings at the Forestry Policy Day Workshop

EEPC researcher, Professor Jintao Xu presenting research findings to China's climate policy makers

EEPC researcher Ms. Xing Chen, PhD Candidate presenting research findings at a policy work-shop of the Asian Development Bank

We organized three consolidated workshops that combined a research project's report presentation and the EfD policy day workshop.

The first workshop concerned China's regulations on eucalyptus farming. Eucalyptus farming in the country's subtropical regions is considered a promising source of domestic timber supply, yet has been subject to considerable restrictions due to concerns that eucalyptus farming may impact the environment, and institutional constraints such as weak, contested, and unstable forest rights. We initiated a research project to scientifically examine these conjectures. During the policy day and project inception workshop, we took the opportunity to present these findings to senior policy makers from the State Forestry Administration and province level forestry authorities of Guangxi and Guangdong provinces.

The second workshop focused on Beijing's transport policies which are intended to mitigate traffic congestion and air pollution, such as restrictions on driving, and regulations governing number plates. We found that Beijing's number plate lottery system reduced car

ownerships by 20%, mileages by 15%, and travel during peak time. Our results further indicated that the long-debated number plate lottery policy has effectively curbed traffic congestion and fuel consumption, at lower costs than previously perceived. We communicated our research findings regarding the efficacy of these existing policies to senior policy makers from the Beijing Municipal Commission of Transportation, and proffered policy recommendations. In particular, we urged municipal policy makers to reconsider the congestion charge as an economically optimal alternative to existing command-and-control policy instruments.

The third workshop was intended to disseminate our research findings about the outcomes of the pilots of China's environmental taxes and carbon emissions trading scheme, which were planned to be expanded to the entire country in early 2018. Our research attracted considerable interest from policy makers and academics, and shed unprecedented insights on several critical design features of the two policy instruments that were previously much debated.

## Academic Capacity Building



*Dr. Shuai Chen joined Zhejiang University*

In 2017, we continued efforts in academic capacity building activities, with a particular focus on our PhD and post-doctoral programs. Currently we have eight PhD students on our well-established PhD programme. Aside from the intensive training and supervision provided by our center, we make use of our international academic networks to send them abroad in pursuit of further training and research collaboration.

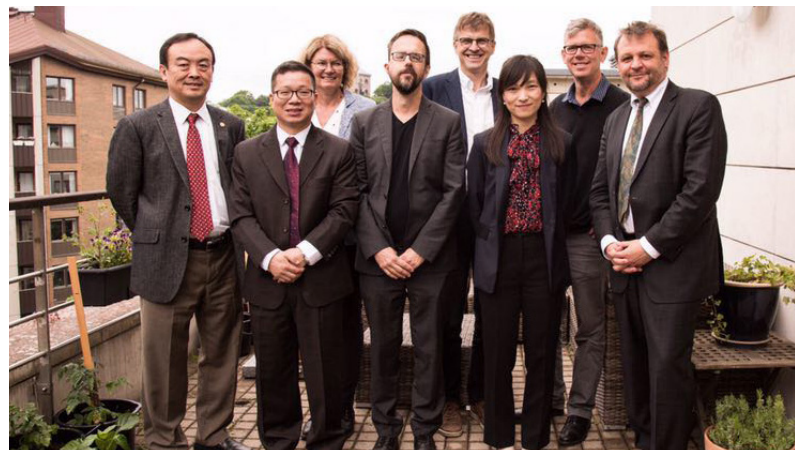


*10 PhD Students on Environmental Economics Course*

*12 Master Students on Environmental Economics Course*



In 2017, two of our PhD students started a one-year visiting program at UC Berkeley's Department of Agricultural and Resource Economics. In addition, Ms. Yuanyuan (Vivian) Yi, who conducted her PhD research under the joint supervision of EfD Sweden and EfD China, successfully defended her thesis and obtained her PhD degree from the University of Gothenburg. Moreover, we create two- and three-year post-doctoral positions, which provide a transition period for early career researchers to publish their PhD research and develop new research projects. In 2017, our post-doctoral research fellow, Dr. Shuai Chen, secured a faculty position at Zhejiang University, a top university in China.



*Ms. Yuanyuan (Vivian) Yi successfully defended her PhD thesis*



## EfD in China

Environmental Economics Program in China (EEPC)

National School of Development, Peking University

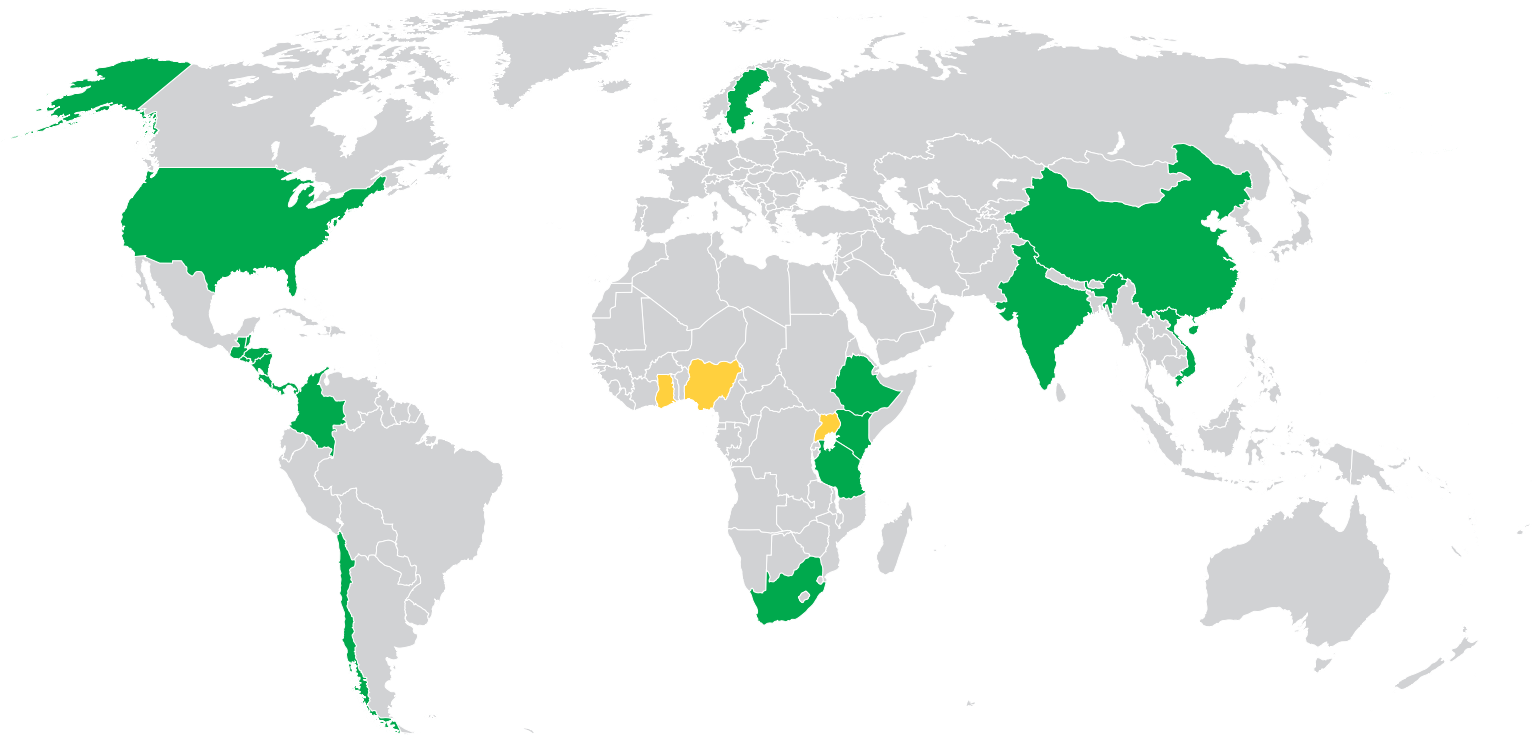
Beijing 100871, China

Director: Prof. Jintao Xu

Tel: +86 10 6276 7657

[eepec@pku.edu.cn](mailto:eepec@pku.edu.cn)

[www.efdinitiative.org/china](http://www.efdinitiative.org/china)



### EfD CENTERS

Centers: Central America, Chile, China, Colombia, Ethiopia, India, Kenya, South Africa, Sweden, Tanzania, USA, Vietnam

### ASPIRING CENTERS

Ghana, Nigeria, Uganda

### PARTNER

Sida

