China-Ghana South-South Cooperation on Renewable Energy Technology Transfer (RETT)

# Identification of barriers to renewable energy technology transfer to Ghana

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### **Outline**

### Introduction

- Part I:
  - Constituents and elements of RETT
  - o Review of Ghana's technology transfer regulations (LI 1547)
- Part II:
  - History, current and future trends of RETT in Ghana
  - Case studies of success stories of RETT globally





### **Outline** (Cont.)

### Part III:

- o Barriers to renewable energy technology transfer to Ghana
- Screening and establishment of key barriers to RETT
- o Removal of key barriers to RETT

### Part IV:

- o Identification and prioritization of RE technologies in Ghana
- Roadmap for RETT to Ghana

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### Introduction

## China-Ghana South-South Cooperation (SSC) on Renewable Energy Technology Transfer (RETT)

- Four-year project that aims to facilitate the development and transfer of Renewable Energy Technologies (RETs) from China to Ghana, along with training and capacity building, know-how and best practices.
- Project expected to establish a SSC Centre in China for transfer of RETs to Africa
- Facilitated by UNDP and EC, and funded by Danish Government





### Introduction

### **South-South Cooperation (SSC)**

- Some developing countries are quite successful in development and production of RETs
- Intra-South cooperation in RETs has potential to support TT and investments into other developing countries and thus build global capacity and know-how.
- SSC is beneficial because developing countries have similar interests and needs for technologies

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## Introduction

### Why focus on China?

- China is a destination for R&D related investments by foreign companies and countries
- This has brought a lot of highly sophisticated technology to China, making it one of the largest economies in the world today, and a technology powerhouse
- China has moved from importing technology, to locally manufacturing and exporting similar technology





## Why focus on China?

- China has also achieved a lot in renewable energy
- China made the highest investment or net capacity addition into hydropower, solar PV, wind power and solar water heating in 2013
- In 2013, China invested more in RE than did all of Europe combined, and it invested more in renewable power capacity than in fossil fuels
- The fact that China is itself on the ascendancy due to the benefits it has
  derived from technology transfer, rightly positions them be able to assist
  Ghana and other countries and lead them towards achieving similar feat.

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## Objectives and scope of assignment

- Describe RETT and its components and forms;
- Review Ghana's Technology Transfer Regulations, 1992 (LI 1547)
- Study past and current RETT programmes in Ghana, focusing on those related to China and other developing countries;
- Study successful case studies of RETT at the global level, analyzing factors that contributed to the success as well as lessons from such programmes





## Objectives and scope of assignment

- Prioritize relevant RETs based on their potential for technology transfer in Ghana, with emphasis on China and other developing countries;
- Examine barriers to RETT, highlighting any Chinese experience whenever possible;
- Examine and screen all barriers, identify key ones and propose concrete measures to tackle the barriers; and
- Propose a detailed roadmap for RETT in Ghana.

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### Focus on China

- 1. Identifying academic and research institutions, technology and training centres, and institutes in China that are well positioned to support RETT to Ghana?
- 2. Identifying key factors that facilitated TT from developed countries to China
- 3. Studying how Chinese Technology Transfer (TT) Regulations and Intellectual Property Rights (IPR) laws/policies contribute (if any) to RET development in China?
- 4. Studying key barriers to RETT encountered by China during the rapid RET uptake and dissemination period?
- 5. Identifying strategies put in place to remove RETT barriers in China during the period of rapid RET uptake and dissemination?
- 6. Finding how private companies in Ghana can benefit from TT from their counterparts in China in a way that is mutually beneficial to both sides?

