

DEVELOPMENT COORDINATION

A. Major Development Partners: Strategic Foci and Key Activities

1. The project under the Asian Development Bank (ADB) South Asia Department (SARD) is being coordinated closely with both ADB internal and external stakeholders, including (i) ADB's Industrial Energy Efficiency Finance Program,¹ which has a similar component in financing hybrid Hoffman kilns (HHKs); and (ii) ongoing and planned brick sector assistance programs from the World Bank, the United Nations Development Programme (UNDP), and Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation or GIZ).² Proposed capacity building technical assistance (TA) supports the project implementation.

2. Internally, the ADB Private Sector Operations Department (PSOD) and SARD have been coordinating closely on the project designs, both of which cover the brick sector in Bangladesh. The Industrial Energy Efficiency Finance Program addresses more broadly the industrial energy efficiency and covers seven industries—brick making, textiles, steel, cement, ceramics, chemicals, and agri-industries. In the brick sector, the PSOD transaction promotes pilot projects in HHKs in the amount of \$6 million. The proposed (SARD) project focuses exclusively on the brick sector, by providing \$50 million to support the promotion of other cleaner or advanced brick technologies, including improved zigzag kilns, vertical shaft brick kilns, HHKs, and tunnel kilns. The proposed capacity development TA from SARD will support a more comprehensive brick sector development effort, including in policy and regulatory formulation, technology awareness-raising, technical and business support, research and development, and emerging alternative livelihood needs. PSOD could greatly benefit from SARD's more comprehensive brick sector development effort.³

3. The World Bank's Community Development Carbon Fund provides carbon finance to eight new energy efficient HHKs to reduce carbon dioxide emissions in Bangladesh.⁴ In addition, the World Bank's Clean Air and Sustainable Environment Project provides \$14.3 million TA and other supports to promote brick kiln pilot models in Bangladesh. Finally, the World Bank is also providing a \$3.5 million TA to support the development of seven zigzag kilns, seven vertical shaft brick kilns, 5–7 HHKs, and two tunnel kilns. There is additional support that addresses Bangladesh's brick sector policy and regulatory improvement. These works are to be commenced within 2012-2013 period.

4. UNDP's Improving Kiln Efficiency in the Brick Making Industry TA provides \$3 million to promote HHK technologies. In addition, UNDP indicated parallel financing of (i) \$11 million from the Industrial and Infrastructure Development Finance Company (a key nonbank financial institution based in Bangladesh), (ii) \$0.08 million from Clean Energy Alternative (a consulting firm based in Bangladesh), \$0.05 million from Xi'an Institute (a major Chinese brick research

¹ ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Loan Facility and Technical Assistance to the Industrial and Infrastructure Development Finance Company and Other Financial Institutions for the Industrial Energy Efficiency Finance Program in Bangladesh*. Manila (Loan 7349-BAN).

² Potentially also with the Danish Ministry of Climate and Energy.

³ In terms of funding difference, the SARD loans will be priced based on market conditions, and is limited to only 50% of total subproject cost. Therefore, the SARD loans will not crowd out the PSOD loan.

⁴ The first tranche of the Community Development Carbon Fund is capitalized at \$128.6 million with 9 governments and 16 corporations and organizations participating. It is currently closed to further subscriptions.

center), and others (\$0.14 million).⁵ A technical center is to be established for the promotion of advanced brick kilns.

5. GIZ's Sustainable Energy for Development Project provides reliable and efficient modern energy services as a key assistance to reduce poverty. Under the Efficient Energy for Bangladesh Project component there are plans to develop 20 modern brick kilns (10 are already in operation) at €750,000 per brick kiln for a total project cost of €10.05 million. The carbon saving is expected to be 2,850 tons of carbon dioxide per year. GIZ also plans to promote perforated and hollow bricks in Bangladesh.

Major Development Partners

Development Partner	Project Name	Duration	Amount ^a (\$ million)
Energy Efficiency and Conservation			
Asian Development Bank	Industrial Energy Efficiency Program	2011–2018	30.0
Danish Ministry of Climate and Energy (DMCE)	Improving Kiln Efficiency in the Brick Making Industry in Bangladesh (Bundles I and II) (DMCE is a parallel carbon purchaser with the World Bank: rate of \$15.20 per ton of carbon dioxide [CO ₂] for up to 60,000 tons.)	2011–2016	0.9
Gesellschaft für Internationale Zusammenarbeit	Sustainable Energy for Development Project	2007–2011	€10.5
The World Bank	Improving Kiln Efficiency in the Brick Making Industry in Bangladesh (Bundles I and II) (The World Bank is a parallel carbon purchaser with DMCE: rate of \$15.20 per ton of CO ₂ for up to 189,000 tons.)	2011–2016	2.9
	Clean Air and Sustainable Environment Project	2009–2014	14.3
United Nations Development Programme	Improving Kiln Efficiency in the Brick Making Industry	2010–2014	3.0

^a The amounts represent the total project cost, which may exceed the project components in brick sector development.

Source: Asian Development Bank.

B. Institutional Arrangements and Processes for Development Coordination

6. ADB is currently the only direct lender to Bangladesh's brick sector, and there is no duplication of (lending) efforts with other development partners.⁶ ADB is processing a capacity development TA that will be fully coordinated with the relevant development partners.⁷ ADB will closely coordinate with the World Bank on its policy and regulatory reform work in order to design and implement a similar capacity development TA component.

⁵ UNDP. 2010. *UNDP Project Document: Improving Kiln Efficiency in the Brick Making Industry*. Dhaka.

⁶ The Bangladesh Bank is the only institution that offers direct lending support to fund HHKs.

⁷ Capacity Development Technical Assistance Concept Paper (accessible from Supplementary Document No. 14 of the Linked Documents in Appendix 2).

C. Achievements and Issues

7. A number of brick sector development workshops have been hosted by ADB, the World Bank, and GIZ for their respective assistance programs; TAs from the World Bank and UNDP are ongoing. The World Bank intends to finalize the improved zigzag kiln design standard during 2012, which will greatly benefit the ADB loans to generate the needed commercial and technical benefits. In November 2011, the Clean Development Mechanism executive board approved the World Bank's bundle 1 of the HHK projects that consists of 10 bundled brick projects using HHK technology. Together, these projects will earn 54,700 tons of carbon credits per year. The World Bank and the Danish Ministry of Climate and Energy will purchase these carbon credits at a price of \$15.20 per ton.

D. Summary and Recommendations

8. The ADB SARD project and the PSOD Industrial Energy Efficiency Finance Program are the only two direct lending assistances in Bangladesh to support development of the brick sector. The World Bank, UNDP, and GIZ provide carbon finance, TA, and research and development support. Many synergies exist among development partners. For example, ADB's direct financing will lead to the emergence of more HHKs and tunnel kilns, which can potentially benefit from the World Bank's carbon finance program. The policy and regulatory support from the proposed ADB capacity development TA and GIZ's promotion of perforated and hollow bricks will benefit the entire brick sector in Bangladesh.

9. It is recommended that ADB consult closely with relevant development partners on the processing of the proposed capacity development TA, which includes an objective to establish a joint donor-supported national brick technical and information center as a one-stop shop for all brick sector development needs in Bangladesh. The joint brick sector program could generate a greater and more efficient developmental impact.