



Infrastructure

Engage the BOP as customers for housing, energy, communication technology, or water services, considering the costs of externalities such as climate change, local pollutions and biodiversityⁱ

The Opportunity

Individuals living on between \$2.97 and \$8.44 a day invest **\$710 billion a year in infrastructure that includes housing, modern energy services, communications, and water services.**ⁱⁱ These numbers demonstrate that providing infrastructure products and services to the BOP is an immense market.

The UN Human Settlements Program estimates that **more than a billion people don't have access to adequate shelter** and by 2030 approximately 40% of the world's population will need proper housing and access to basic infrastructure and services such as water and sanitation systems.ⁱⁱⁱ Offering housing and utilities to the BOP addresses the unmet needs of billions of individuals.

Access to modern energy services is a vast, unmet need, with around 1.4 billion people lacking access to electricity and an estimated 3 billion people relying on solid fuels such as biomass and coal to meet basic needs.^{iv} Creating energy solutions for the BOP enables companies to meet demand for modern energy services.

Primary Business Models Employed

(note that businesses may employ components from multiple models or entirely different models)

Piggy-backing channels: The business uses (and/or upgrades) existing informal sales and distribution channels to access new customers.^v

"Last-mile" infrastructure: The business provides end-users with a fixed utility asset, establishing community-level "last-mile" infrastructure. For example, a company establishes a water kiosk in a slum to provide customers with water at a lower cost than alternatives such as sachets or tanker supplies. Customers may pay per use, delivering better value for the customer and matching their cash flows.^{vi}

Pay-per-use: The business sells a single use-product or a service at lower costs for BOP consumers.^{vii}

Off-grid utilities: The business develops small-scale purification or generation systems to provide safe, affordable utilities in places it is uneconomical to reach through the grid.^{viii}

Value-for-money housing: The business facilitates home ownership by providing affordable properties with features that reduce the ongoing cost of ownership and enabling access to mortgage financing.^{ix}

Company Examples

Celtel: Delivers affordable mobile communications technology to BOP customers in sub-Saharan Africa through local employees.

CEMEX: Offers training, funding, and technical assistance to low-income customers so they can construct their own homes more quickly and efficiently.

Manila Water: Provides safe, reliable water and wastewater services to more than 6 million people in Manila.

Simpa Networks: Provides a basic, portable solar home system to BOP customers in India who pay based on power usage.

Key Considerations/ Risks

Models in this sector may require significant up-front capital and recovering this initial investment may take longer given the nature of the market. Leadership support of this investment is critical.

Market entry strategies and distribution models in this sector often require the engagement and participation of local communities. The BOP should be actively engaged in developing a solution.

Companies engaged in infrastructure initiatives with the BOP have emphasized the importance of a long-term vision and patience in getting the business model right.^x

Potential SDG Alignment



ⁱ World Bank Group (2015). *Infrastructure Strategy Update FY2012-2015: Transformation Through Infrastructure*. Available from <http://siteresources.worldbank.org/INTINFRA/Resources/Transformationthroughinfrastructure.pdf>

ⁱⁱ The World Bank. Global Consumption Database: What the data tell us. Available from <http://datatopics.worldbank.org/consumption/market>

ⁱⁱⁱ Business Call to Action (2014). *Breaking Through: Inclusive Business and the Business Call to Action Today: Mapping Challenges, Progress and the Way Ahead*, September 2014. Available from http://www.businesscalltoaction.org/wp-content/uploads/2014/09/BCtAImpactReport_BreakingThrough.pdf

^{iv} Ibid.

^v Monitor Group (2011). *Promise and Progress: Market-Based Solutions to Poverty in Africa*, May 2011. Available from <http://web.mit.edu/idi/idi/Africa-%20PromiseAndProgress-MIM.pdf>

^{vi} Ibid.

^{vii} Ibid.

^{viii} International Finance Corporation (2011). *Accelerating Inclusive Business Opportunities: Business Models that Make a Difference*. Available from <http://www.ifc.org/wps/wcm/connect/12216300487cbe85bbddf51e3a7223f/InclusiveBusinessReport2011.pdf?MOD=AJPERES>

^{ix} Ibid.

^x Business Call to Action (2014). *Breaking Through: Inclusive Business and the Business Call to Action Today: Mapping Challenges, Progress and the Way Ahead*, September 2014. Available from http://www.businesscalltoaction.org/wp-content/uploads/2014/09/BCtAImpactReport_BreakingThrough.pdf