

The Off-Grid Solar Energy Services Market: IFC's Work to Support Private Sector Investment in Off-Grid Energy Services

Russell Sturm
Global Head
Energy Access
IFC Advisory Services

Off-Grid Energy Workshop
Nay Pi Taw, Myanmar
January 28, 2015

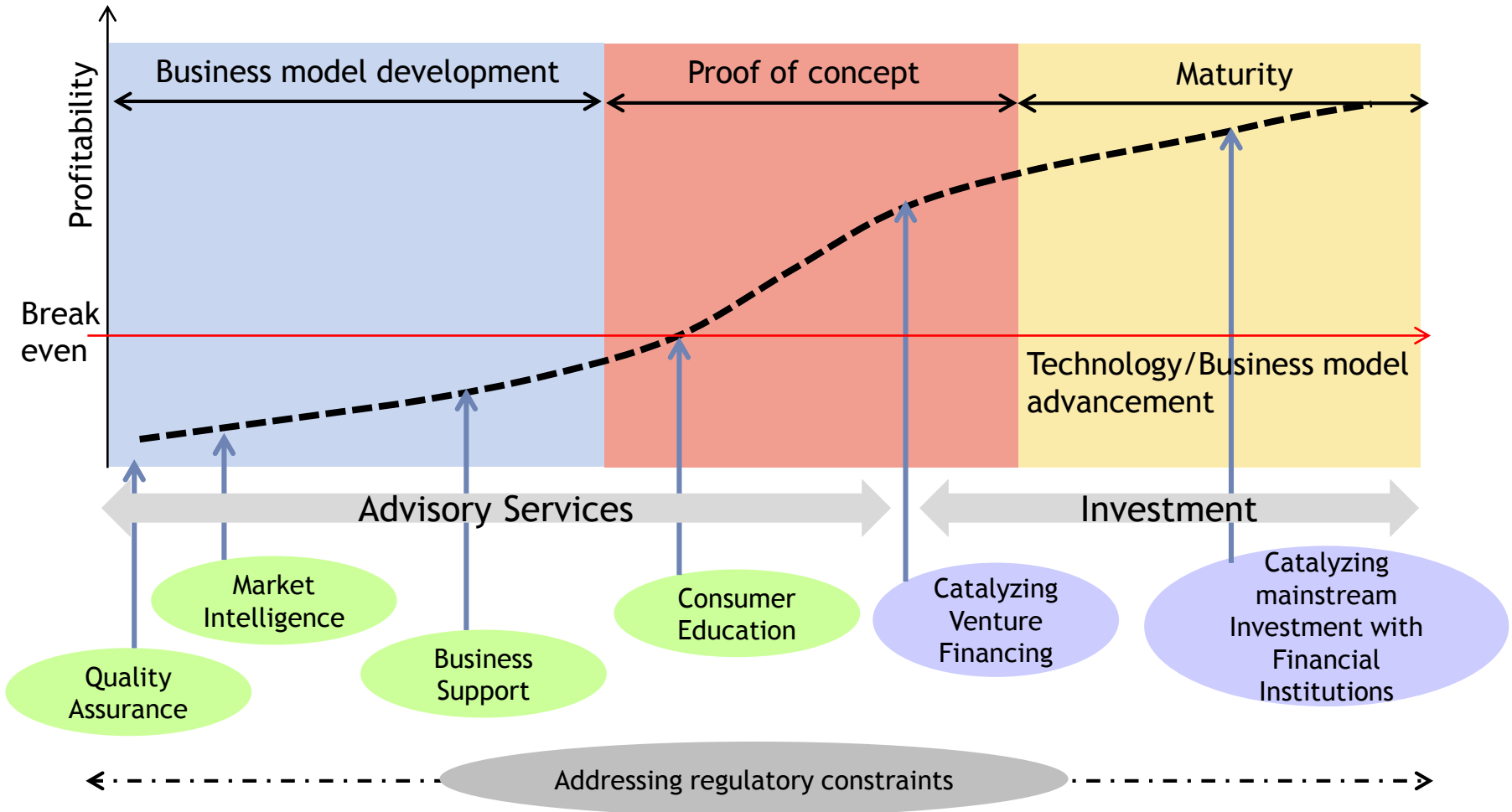


Driving the Market

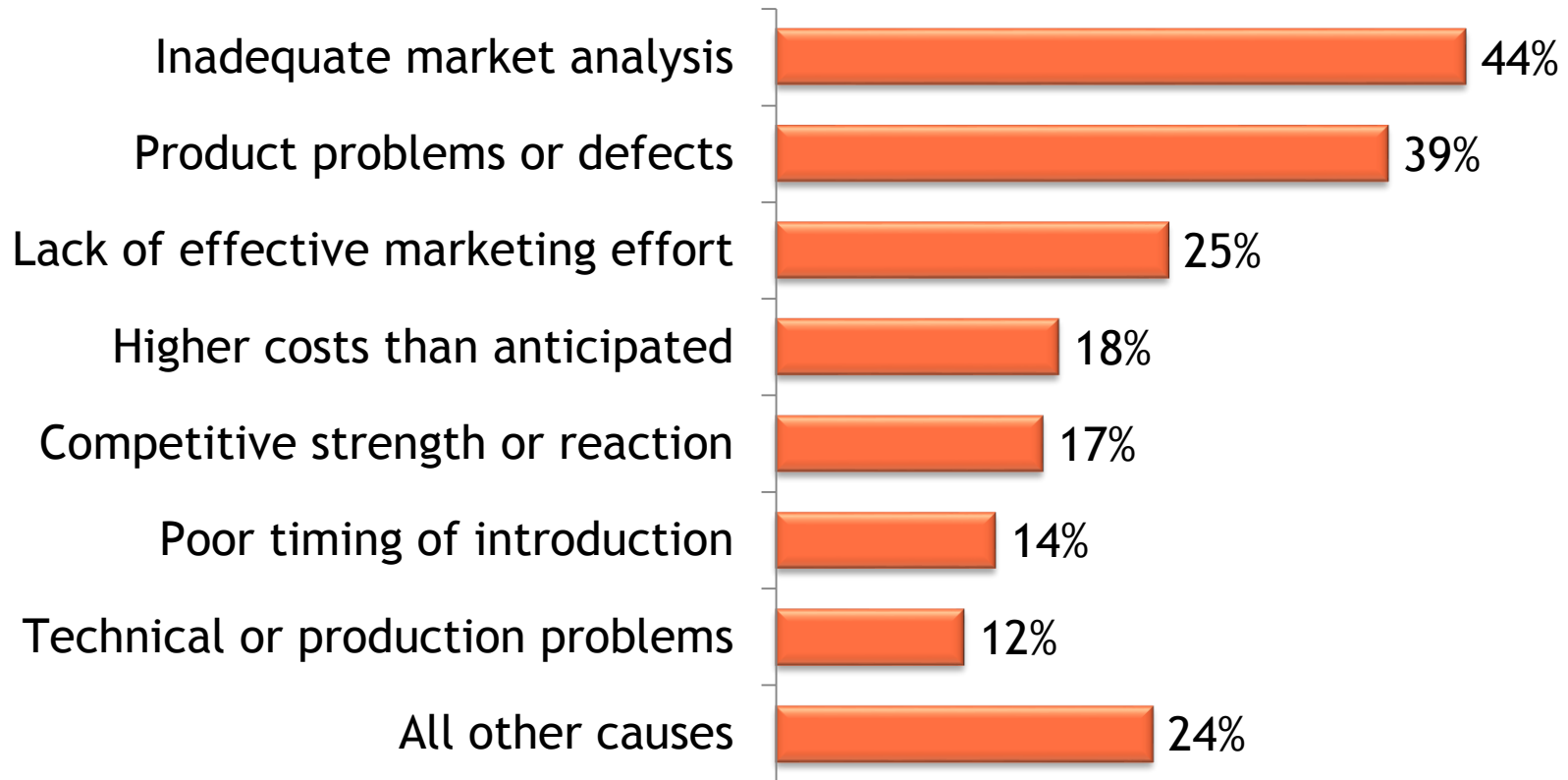
The Lighting Africa / Lighting Asia Experience

Catalyzing market development

Lighting Global operates along the market transformation curve, focusing on specific market support/development activities



Primary reasons for unsuccessful consumer product launch



Source data TNS Research: 2010

Consumer Education: Innovative use of media

The screenshot shows a web browser window with the URL <http://lightingafrica.org/resources/multimedia/video/>. The page title is "Makutano Junction". The main text reads: "Makutano Junction is a popular Kenyan edutainment soap opera widely watched in both urban and rural areas. It has been used by many development organisations to embed pertinent development messages on issues of education, health, energy, governance, etc. The soap provides a light entertaining story line of the day-to-day lives of ordinary Kenyans around which it builds in development messaging. Lighting Africa's consumer education campaign in Kenya also incorporated key consumer messages in one season (episodes below) of this soap to increase product awareness and knowledge .". Below the text are six video thumbnails, each with a play button and a progress bar. The thumbnails are labeled "Makutano Junction S12Ep01" through "Makutano Junction S12Ep06". The browser's taskbar at the bottom shows various application icons and the system clock displaying 10:22 PM on 6/11/2014.

Engaging in a spoiled market: building a sustainable market on a foundation of quality

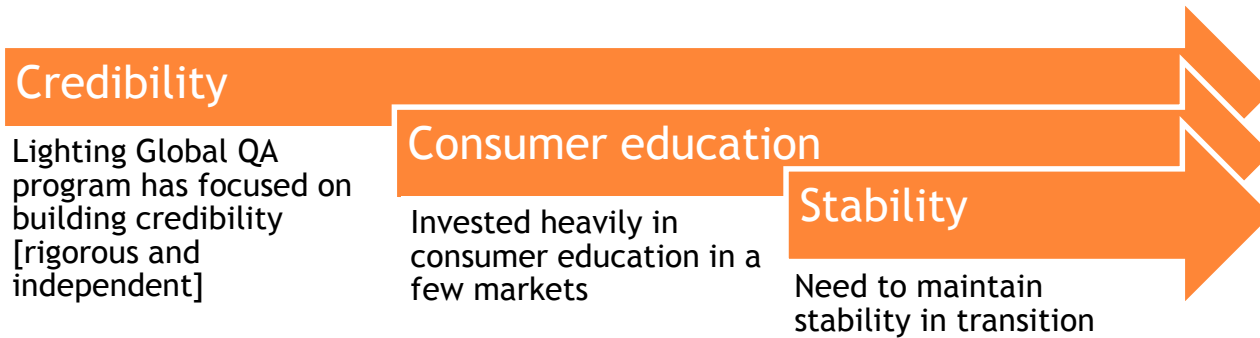
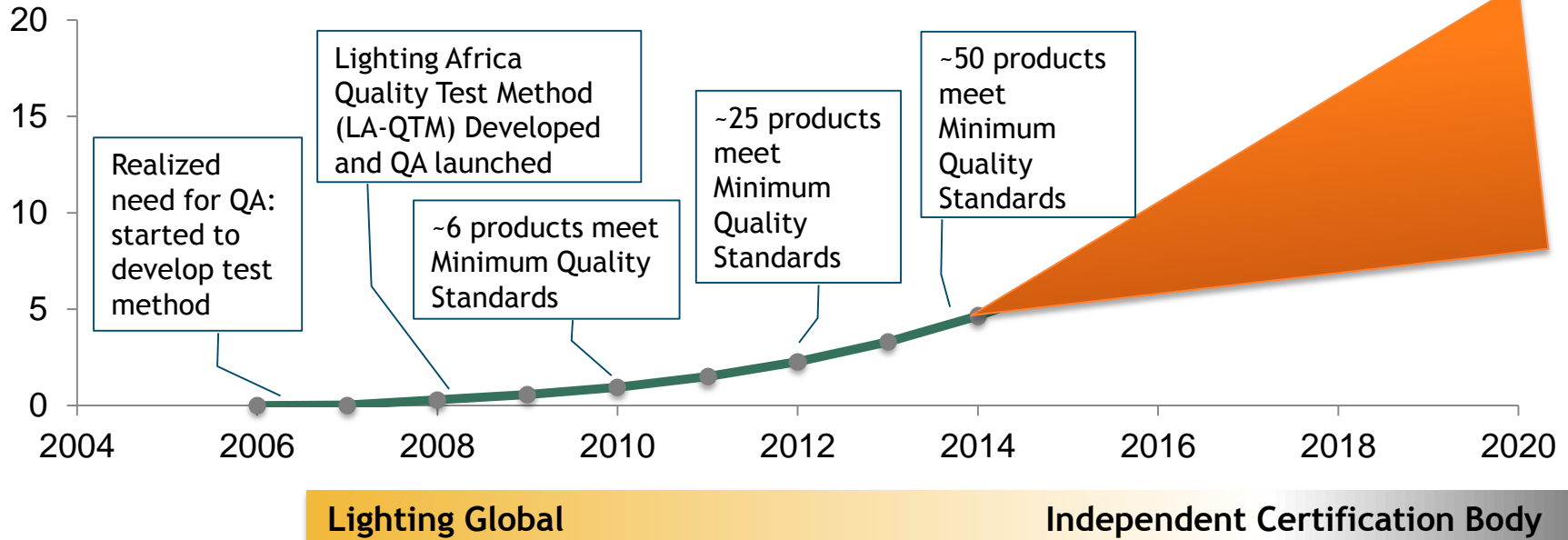


How products are tested



Quality Assurance is foundational to growing market

Total verified good quality products in service (millions)

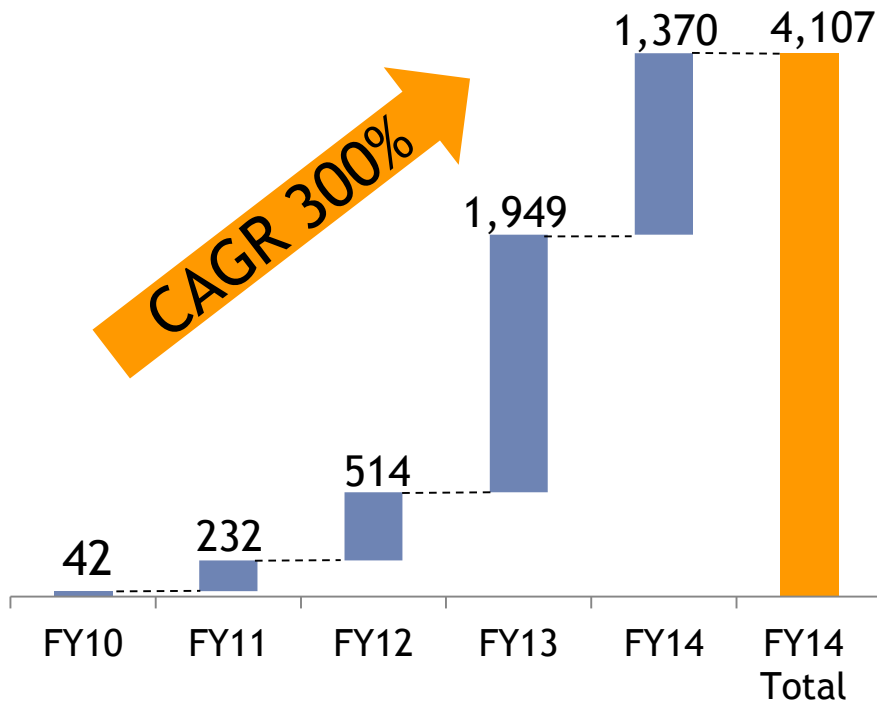


Source: Lighting Global IFC Team

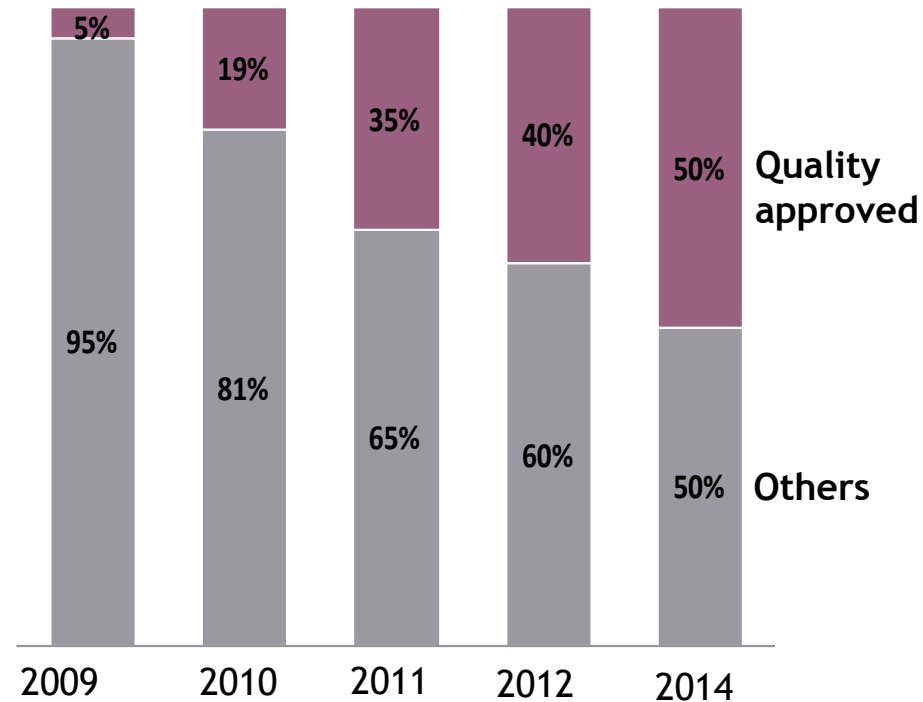
Quality approved SPLs have grown at approximately 300% and now represent over a half of the African market

Cumulative sales of quality-approved SPLs in Africa

Thousand SPLs



Market share of quality-approved SPLs Annual sales

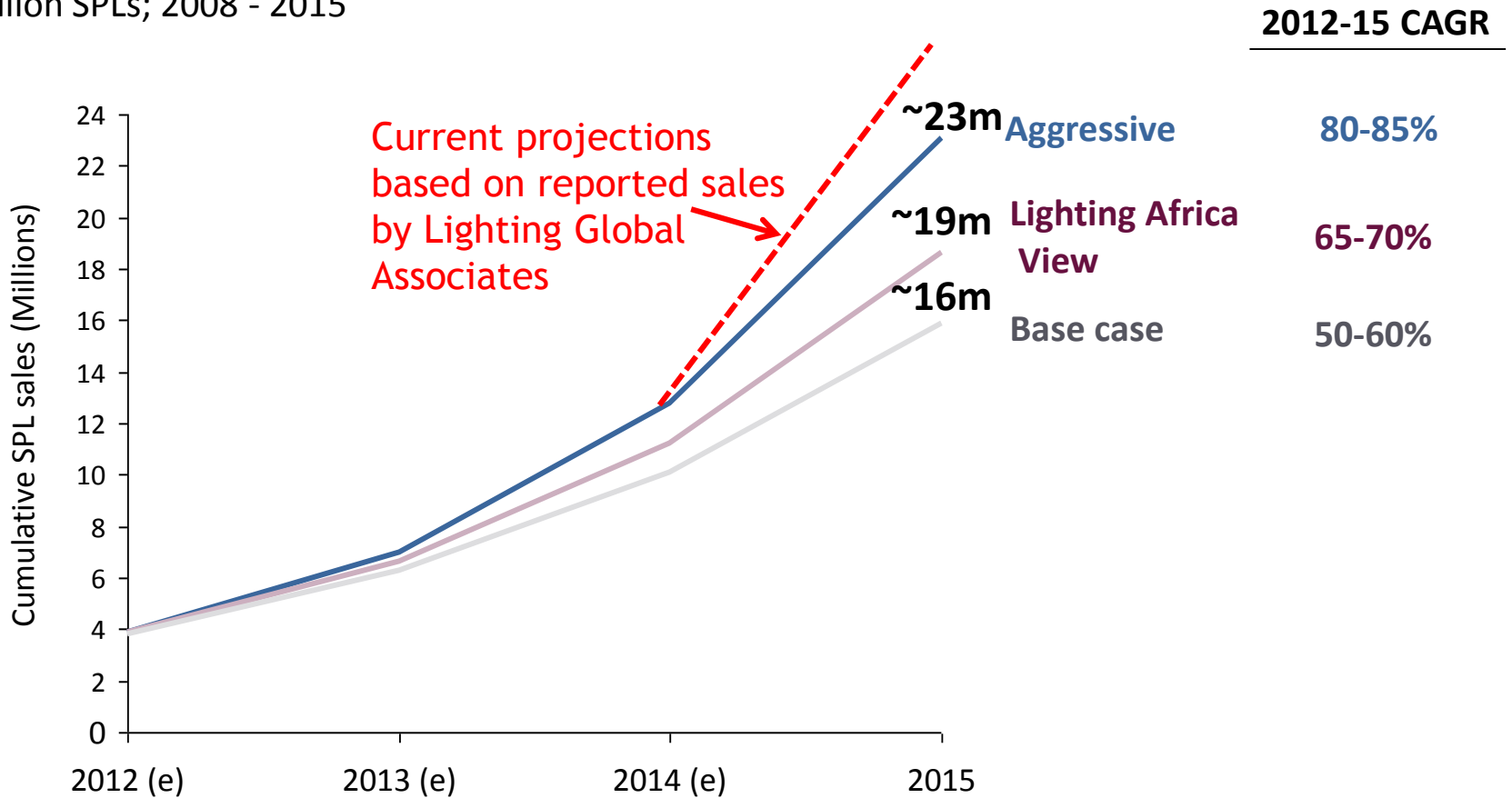


Source: Lighting Africa sales data

Cumulative sales could grow to ~23 million by 2015 in the aggressive scenario

Forecast of cumulative SPL sales in Africa over time

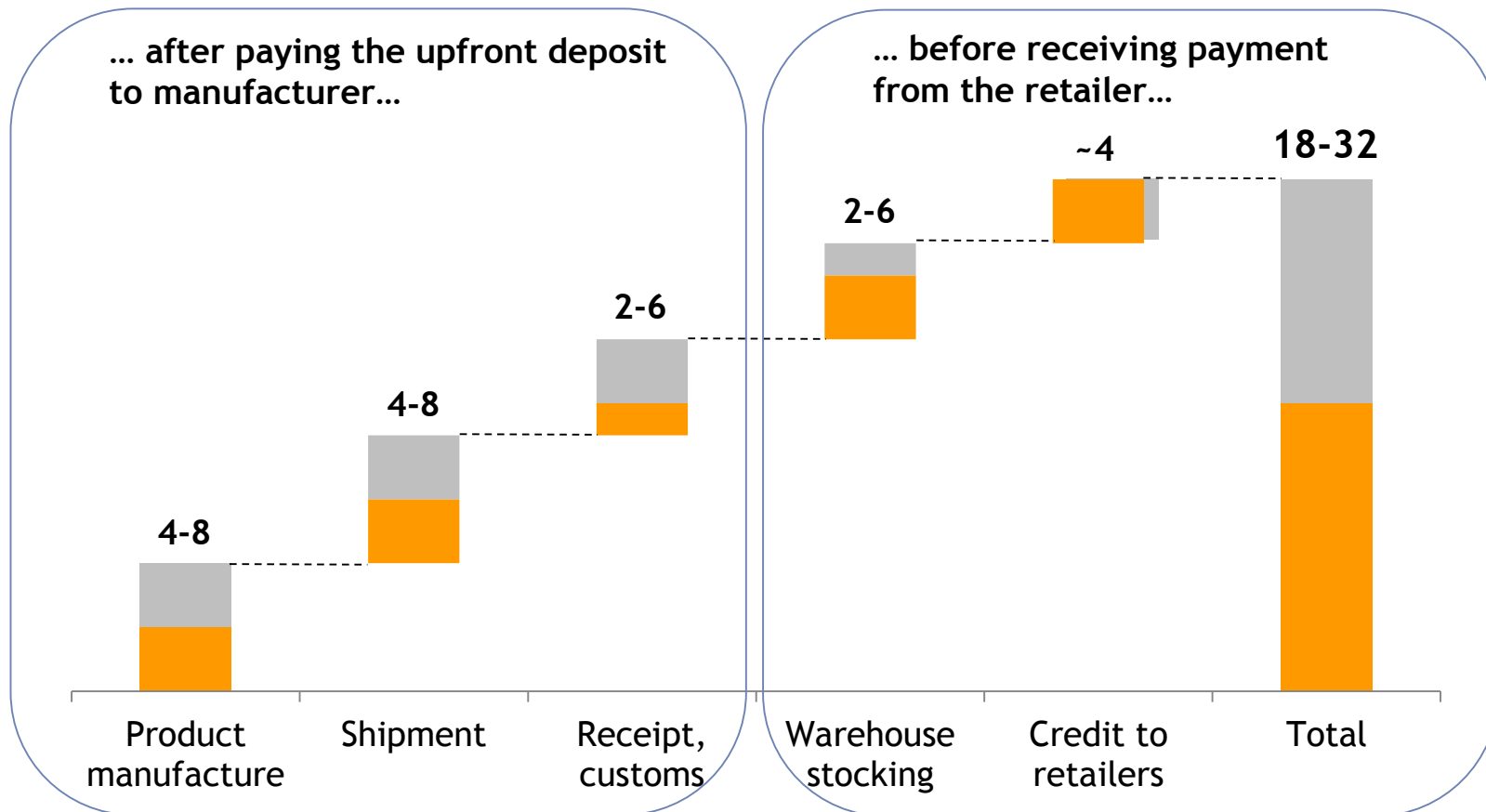
Million SPLs; 2008 - 2015



Aggressive scenario assumes (1) Entry of 2 MNCs; (2) Entry of 2 additional manufacturer-led brands; (3) High growth of pay-per-use models; (4) and aggressive rates of replacement and incremental sales
 Source: Lighting Africa sales data, World bank data set on Population, Dalberg analysis

A growing market constrained by short term cash requirement for manufacturers & distributors

Product distribution timeline from manufacture to sale (in weeks)



Source: “Growth Capital for Off-Grid Lighting Companies”, Lighting Africa (2010); Dalberg analysis

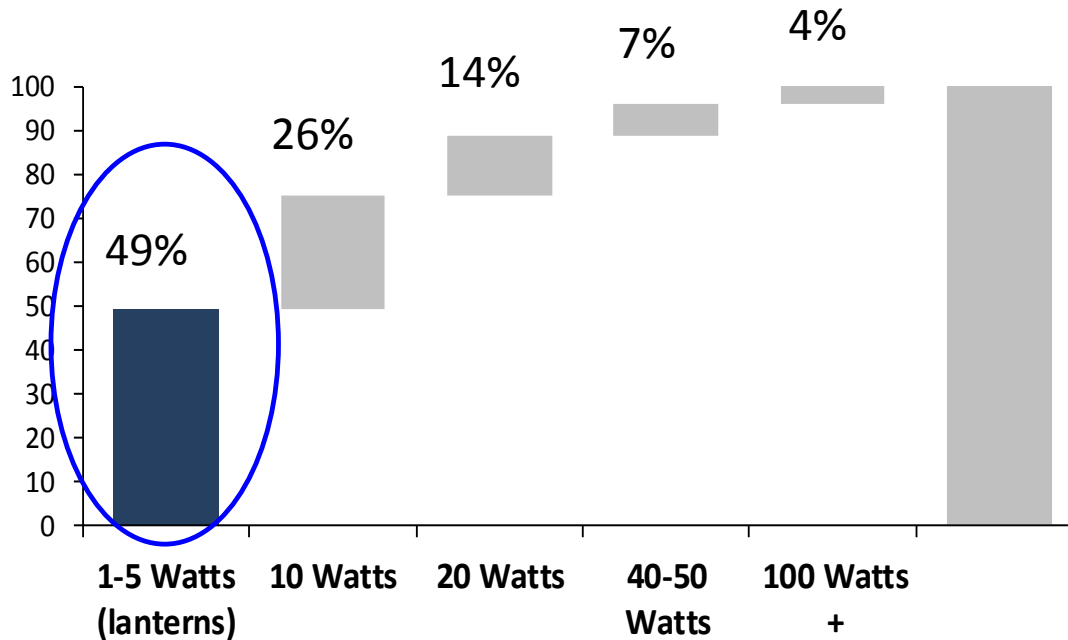
A photograph of two women in traditional African attire, heavily adorned with colorful beaded necklaces and headpieces. They are smiling and standing in a dusty village square with thatched-roof huts in the background. The word "OPPORTUNITY" is overlaid in large white letters, flanked by two horizontal yellow bars.

OPPORTUNITY

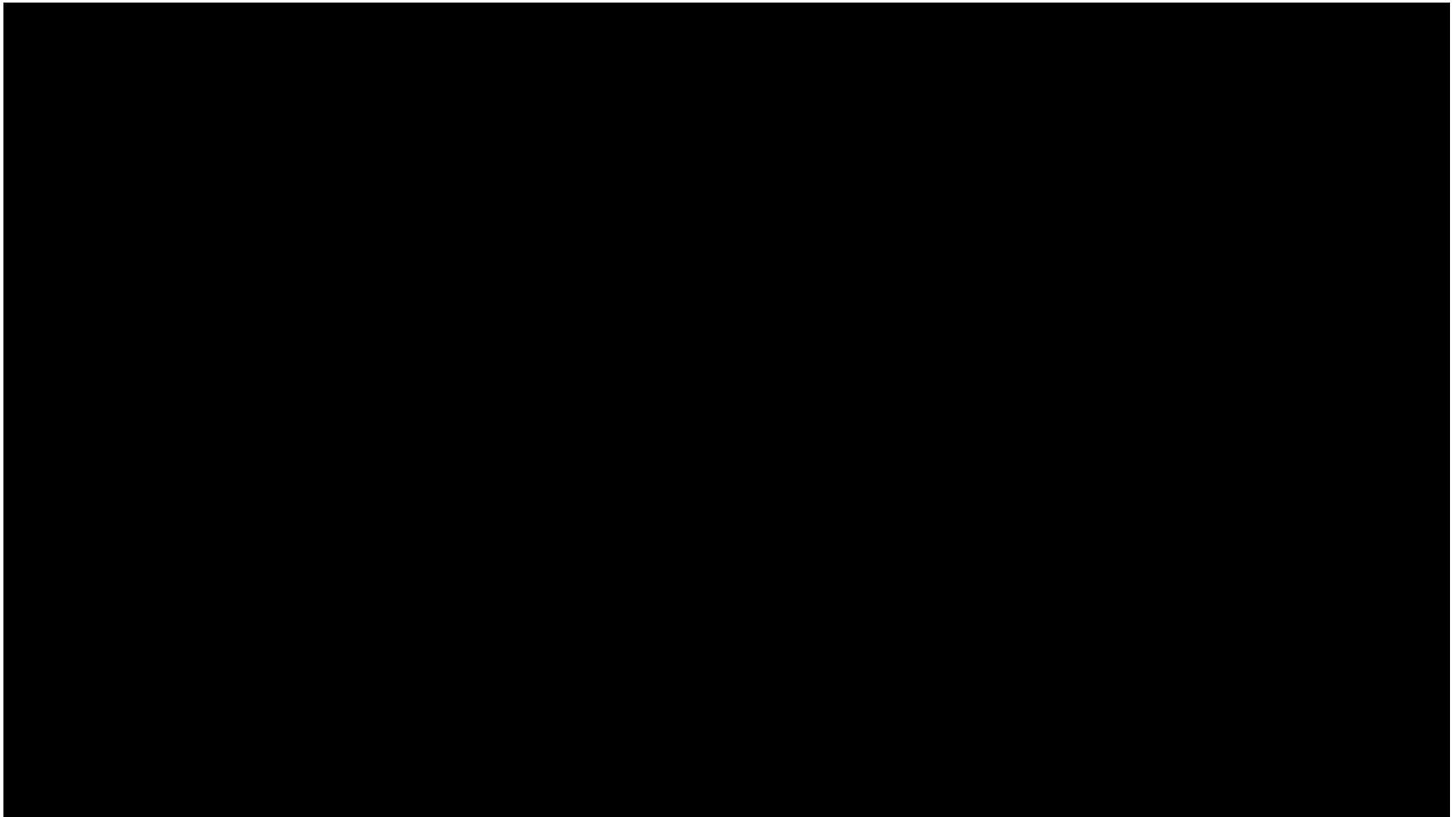
© 2014 d.light design. All rights reserved

Consumer's aspiration is driving innovation and new opportunities: pico-powered lanterns are- the first step in the RE energy ladder

Segmentation of potential market for solar lighting devices

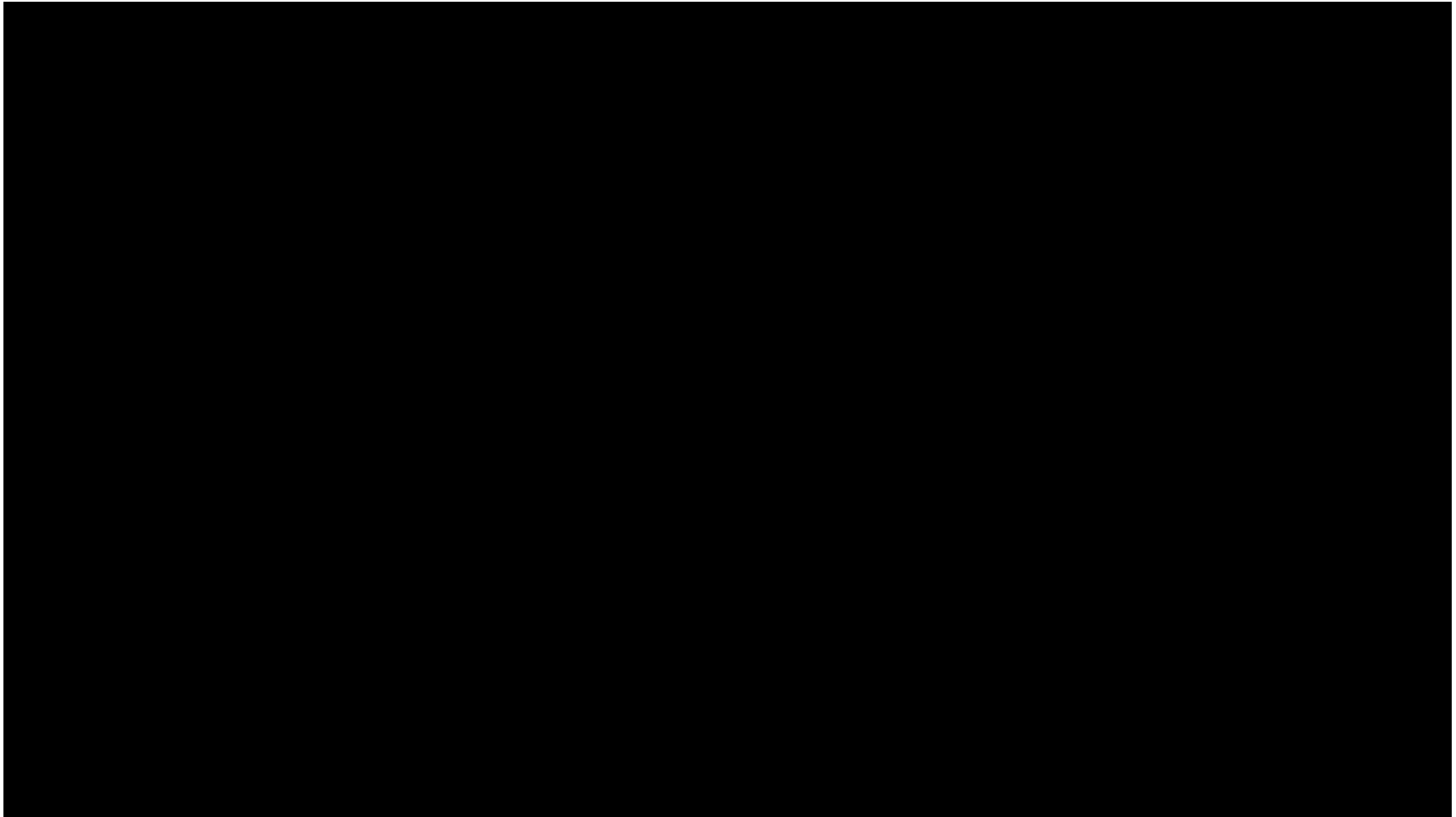


Behind the Market... people



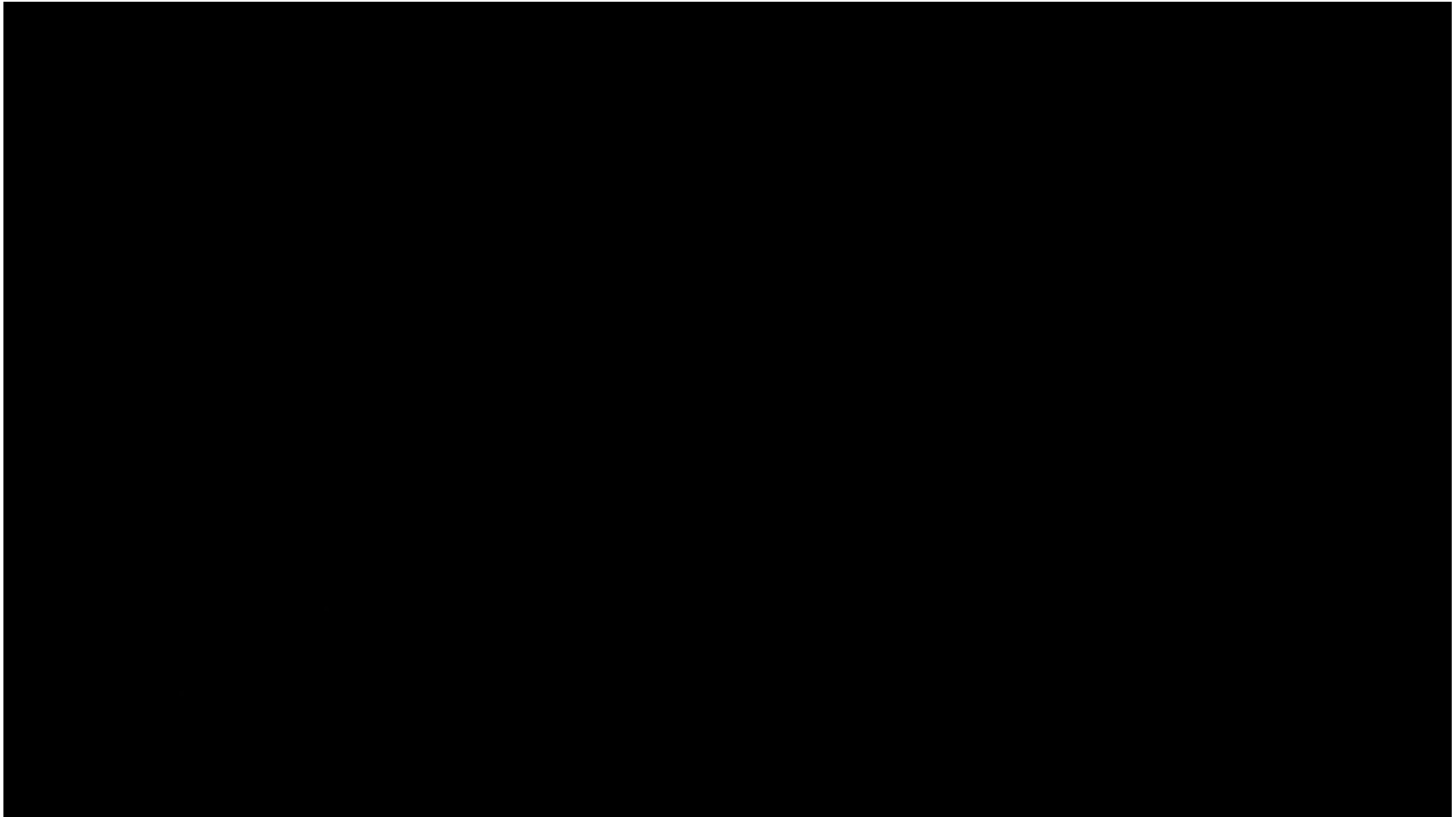
The Farmer

Behind the Market... people



The Hotel Owner

Behind the Market... people



The Bike Shop