

**Energizing the Bottom of the  
Pyramid:  
Scaling-Up Successful Business  
Models to Achieve Universal  
Electrification**

*Business Solutions for Alleviating Poverty  
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**David Jhirad**

**VP, Science and Research  
World Resources Institute  
[djhirad@wri.org](mailto:djhirad@wri.org)**

**Annie Woollam**

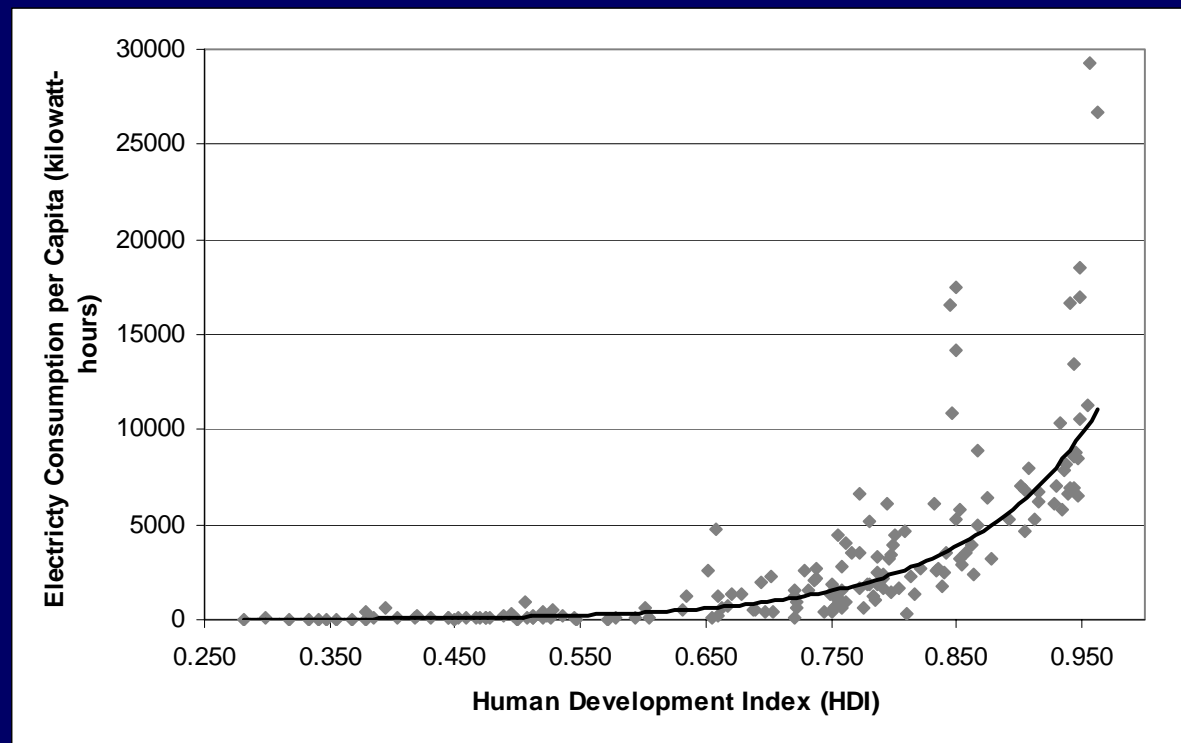
**Business Analyst  
World Resources Institute  
[awoollam@wri.org](mailto:awoollam@wri.org)**



**World Resources Institute**

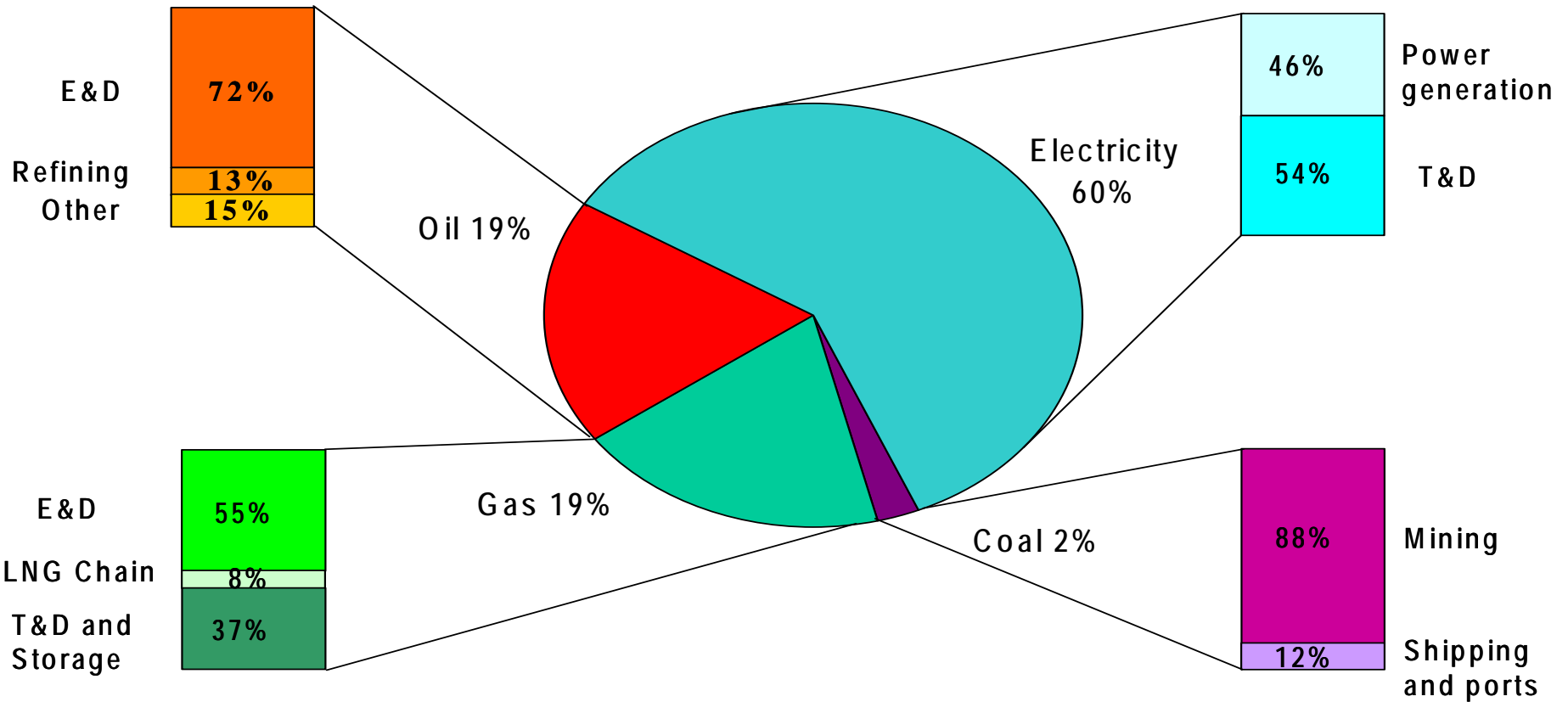
# Energizing Development

- The provision of energy services is a vital precursor to economic development



# World Energy Investment 2001 - 2030

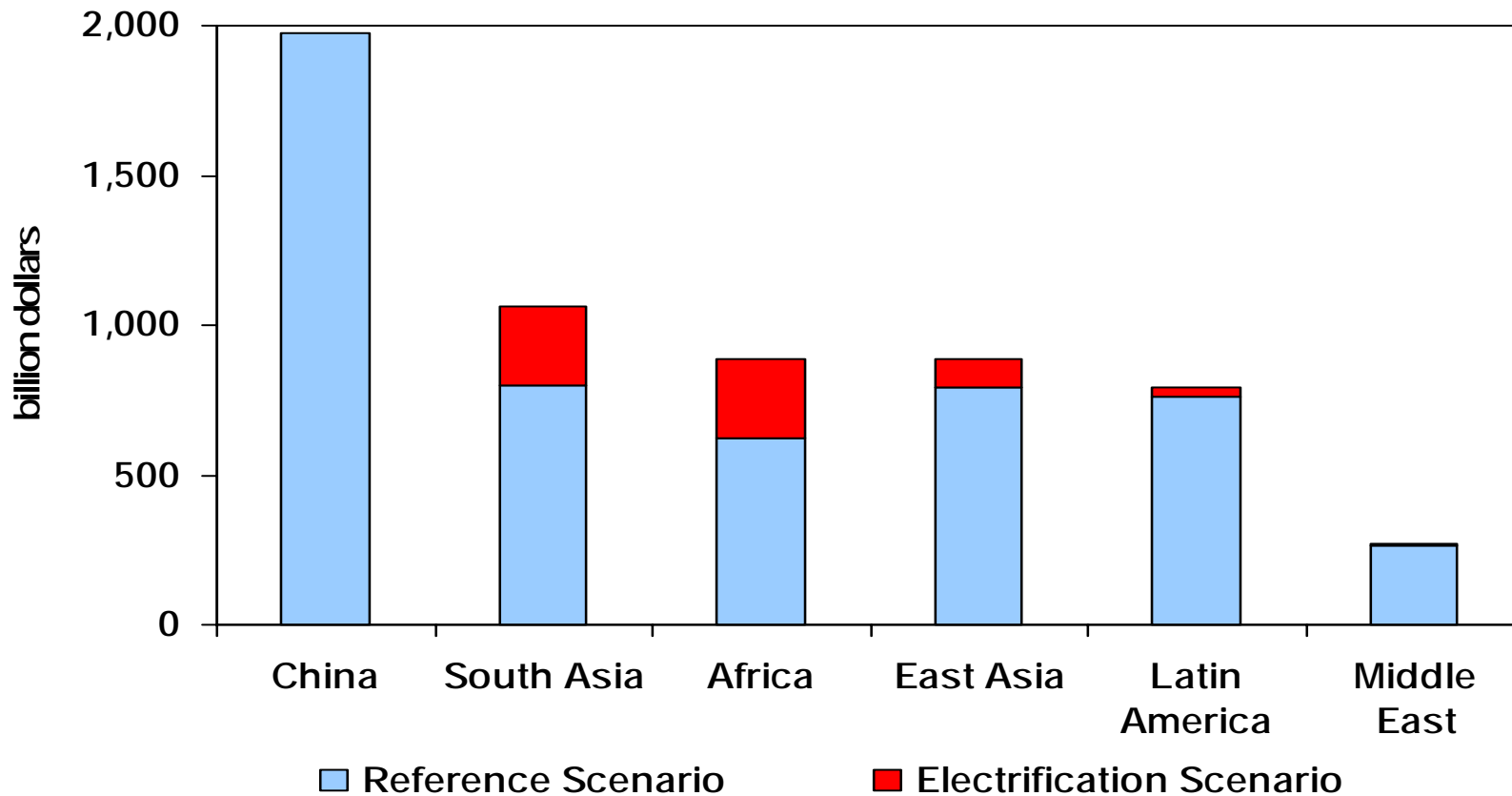
Total investment: 16 trillion dollars



*Production accounts for the majority of investment in the supply chain - except for electricity*



# Investment in Electricity 2001 - 2030



*More than \$660 billion is needed to supply basic electricity services to the world's very poor – mainly in Africa and South Asia*



# Business Models

- Shell Solar – India and Sri Lanka
  - Solar photovoltaic
  - Direct sales/ownership model
- DESI Power – India
  - Biomass gassification
  - Village ownership / Concurrent enterprise development
- IDEAAS – Brazil
  - Solar photovoltaic
  - Fee-for-service / Productive end use development
- E+Co – US NGO, Global Operations
  - Public-purpose investment
  - Business mentoring and provision of seed and growth capital



# Ingredients of Successful Business Models for Electricity Delivery

- An in-depth understanding of the local market
- Availability of project and consumer financing at attractive interest rates
- Concurrent development of the market through fostering electricity consuming enterprises
- A focus on building local capacity for management and maintenance



# Transforming the Market

- Removal of price subsidies and import duties that impair the competitiveness of distributed energy technologies
- Provision of financial incentives for enterprises and consumers
- Strategic marketing and manufacturing breakthroughs to dramatically reduce costs of distributed power systems



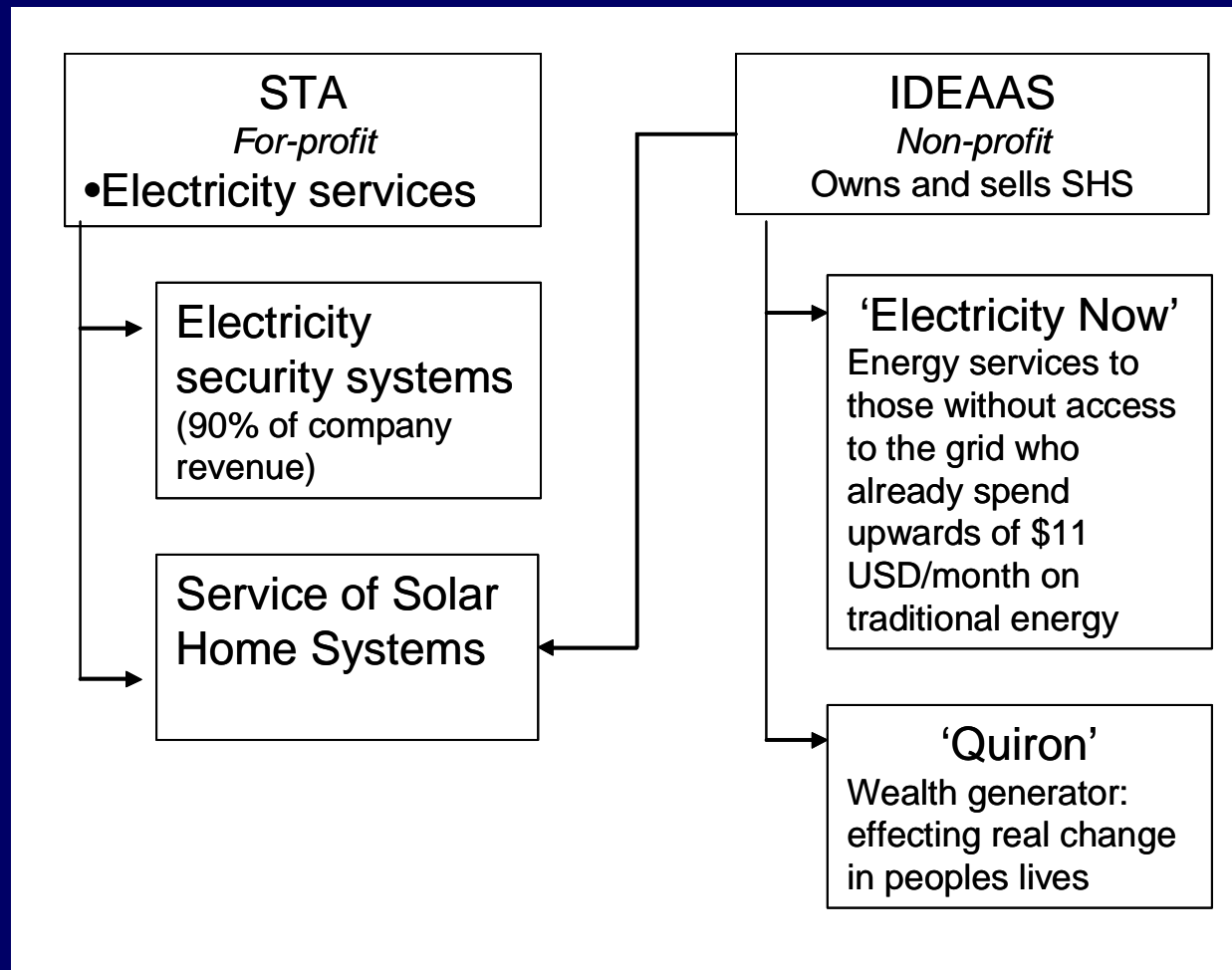
# Back-Up Slides



# Shell Solar – India and Sri Lanka



# IDEAAS - Brazil



# E+Co – US NGO, global operations

