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SPgroup

# Energy project financing

## 能源项目融资

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# Singapore

## 新加坡



- Population ~5.8 million  
(人口~580 万)
- GDP per capita ~USD63,000  
(人均国内生产总值~USD6万3千元)
- Peak Demand ~7GW/day  
(高峰需求~ 7 吉瓦)
- Installed Capacity~12GW/day  
(装机容量~ 12 吉瓦)

# Southeast Asia



## 东南亚



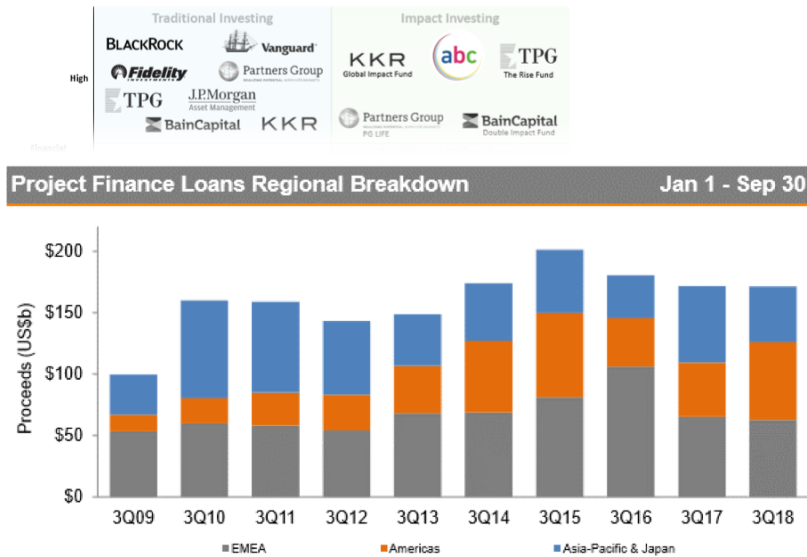
- Population ~641 million  
(人口~6.41 亿)
- No Access to Electricity~45 million  
(无电力供应~450 万)
- Total Power Generation ~240 GW/day  
(总发电~ 240 吉瓦)
- Renewable Generation ~41GW/day  
(可再生能源发电~ 41 吉瓦)

# Sources of Finance

## 资金来源

1. Traditional  
传统来源

2. New  
新资金来源



Project Finance Loans 2018 ~US 170B

AIIB 2018 ~US 7.5B

(Crowdfunding 2018 ~US 100B) (众筹 2018 ~ US 100 亿)

(Renewable Energy Certificate)

(可再生能源证书)

# Uses of Finance

## 资金用途

### 3. Environmental and social focus

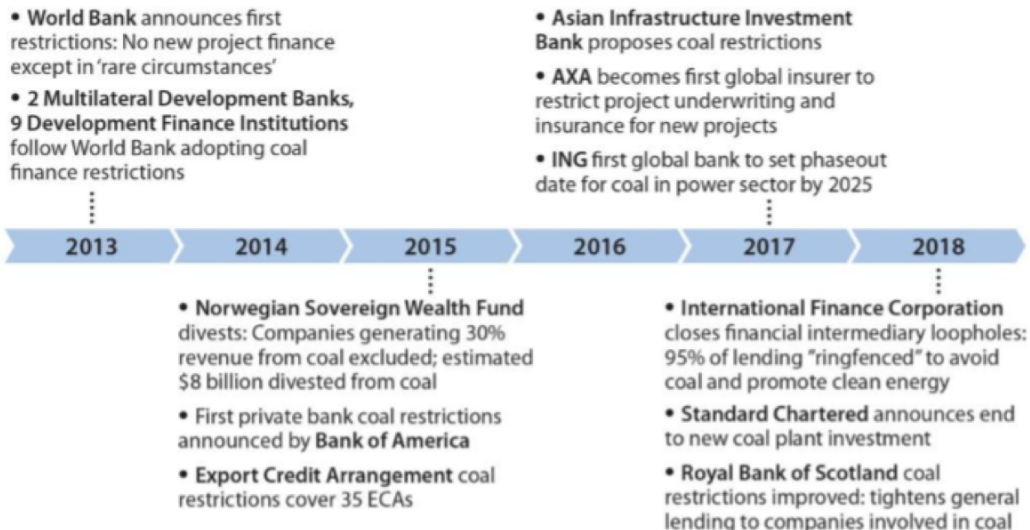
着重环境与  
社会影响

### 4. Project and Investment Size

项目与资金规模

#### Over 100 Major Financial Institutions Now Have Coal Finance Restrictions

To date, over 100 globally significant financial institutions including public development banks, national development finance institutions, export credit agencies, private banks and insurance companies have developed formal thermal coal mining and/or coal-fired power plant exclusion policies.



# 4.8GW Kusile Coal Power Plant (SA) SPgroup

## 库塞尔煤发电厂 - 兴建中 (南非)



- US\$16 Billion\* (\$160亿美元)
- Multiple parties (多方融资)
  - 17 Commercial Banks (商业银行)
  - 3 ECAs (出口信贷机构)
- Planning started from 2007 (2007开始筹划)



# 96MW Jasper Solar Farm (SA)



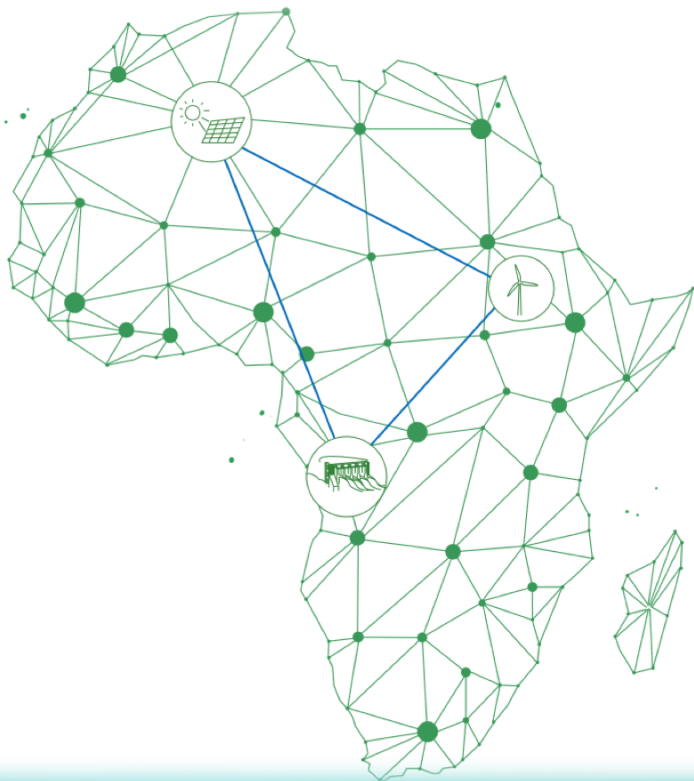
## 碧玉光伏发电厂 (南非)



- US\$260 Million\*  
(\$2.6亿美元)
- 1 bank involved (一家银行)
  - Rand Merchant Bank (兰特商人银行)
  - US\$150 Million (\$1.5亿美元)

# Interconnect

## 能源互联网



- Electricity, Mining, Metallurgy, Manufacturing, Trade  
(电矿冶工业)





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