
OBIN

Off-Grid Business Indicator 2014



World

OBIN

Global Off-Grid Business Indicator

World

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Introduction

Stiftung Solarenergie – Solar Energy Foundation has analyzed overall 66 countries for the Off-Grid Business Indicator (OBIN) regarding their potential for off-grid business. Detailed information for each country is given in the three editions, published in March 2014:

- OBIN Africa
- OBIN South(East)Asia
- OBIN America

The full documents can be downloaded at: <http://sun-connect.org/obin/>

The edition "OBIN World" summarizes the results of the three single editions to one global perspective. The information claim not to be exhaustive or of scientific accuracy. This is not possible because of the imprecision and inhomogeneity of the sources of information.

However, OBIN is a reliable and realistic indicator for the potential and the general conditions of the off-grid market worldwide. OBIN is especially able to demonstrate the great economic potential of this so far largely untapped market

Stiftung Solarenergie - Solar Energy Foundation

April 2014

Executive Summary

1. 1.2 billion people in the surveyed 66 countries do not have access to reliable power supply, with 49% living respectively in Africa and Asia and 2% in America.

The surveyed countries in Asia (70.7%) and America (75.9%) are considerably higher electrified than those in Africa (21.8%).

Due to the larger population, the absolute number of people without access to power supply in African countries is however almost the same as in Asia (Africa 598.7 mill.; Asia 593.0 mill.).

2. The worldwide market potential alone for the replacement of kerosene lamps by simple solar lanterns is **USD 18.8 billion**.

The total market potential for the basic supply of off-grid households with light is **USD 136 billion**.

The potential of the off-grid market in Africa and Asia is almost equal (Africa USD 68.6 billion; Asia USD 64.85 billion), although Africa attracts a significant greater attention in the public perception.

3. The world's top five off-grid markets are India, Bangladesh, Nigeria, Ethiopia and Indonesia, followed by DR Congo, Pakistan, Tanzania, Kenya and Uganda.

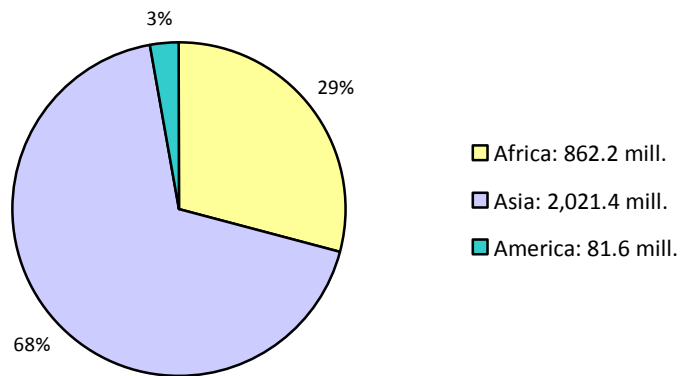
4. The Business Environment in 40% of African countries and 31% of Asian countries is below average or even unacceptable.

5. The most problematic factor for business in Africa is the "access to finance", closely followed by "corruption". The ratio in Asia and America is different: "corruption" is here the most problematic factor for business while "access to finance" is ranked on third position.

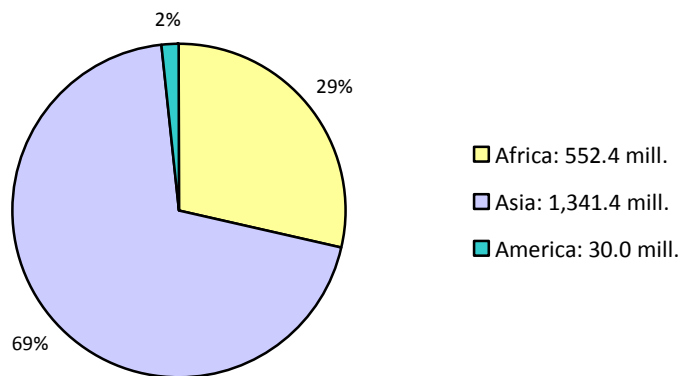
Countries

Afghanistan	Lesotho
Angola	Liberia
Bangladesh	Madagascar
Benin	Malawi
Bhutan	Mali
Bolivia	Mauritania
Botswana	Mongolia
Burkina Faso	Mozambique
Burundi	Myanmar
Cambodia	Namibia
Cameroon	Nepal
Central African Republic	Nicaragua
Chad	Niger
Congo, DR	Nigeria
Congo, Rep.	Pakistan
Cote d'Ivoire	Panama
Djibouti	Papua New Guinea
Equatorial Guinea	Peru
Eritrea	Philippines
Ethiopia	Rwanda
Gabon	Senegal
Gambia	Sierra Leone
Ghana	Somalia
Guatemala	South Africa
Guinea	Sri Lanka
Guinea-Bissau	Sudan / South Sudan
Guyana	Swaziland
Haiti	Tanzania
Honduras	Timor-Leste
India	Togo
Indonesia	Uganda
Kenya	Zambia
Lao PDR	Zimbabwe

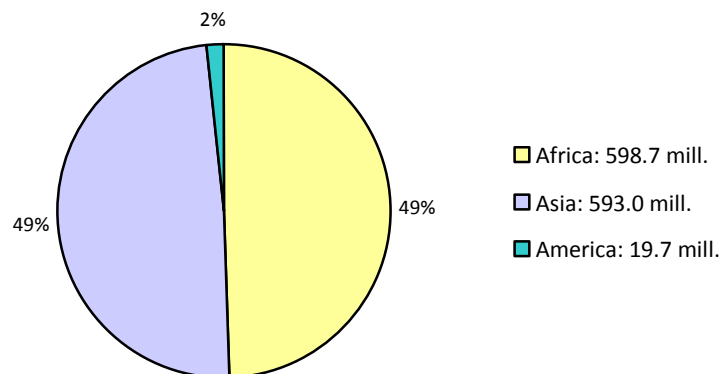
Population total: 2,965.2 mill.



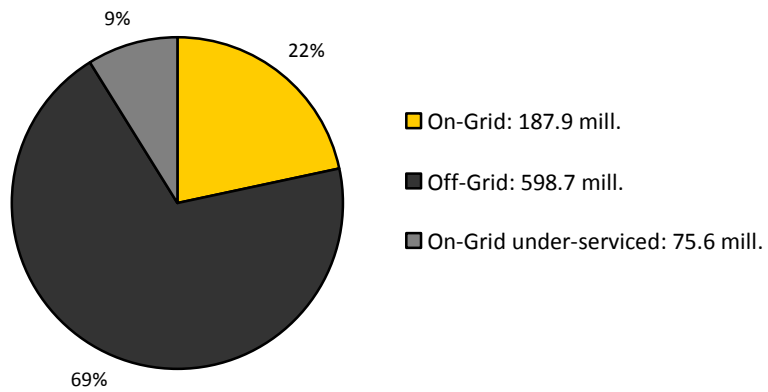
Rural Population: 1,923.8 mill.



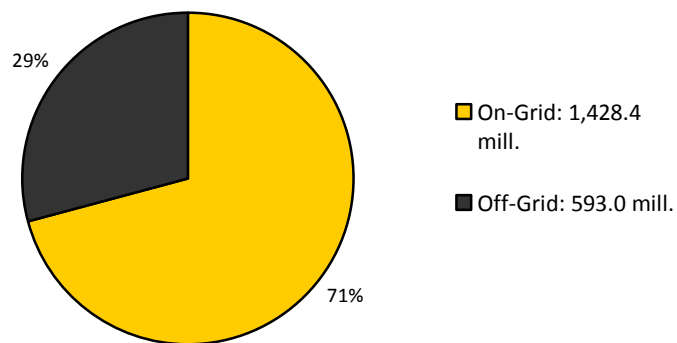
Population Off-Grid: 1,211.4 mill.



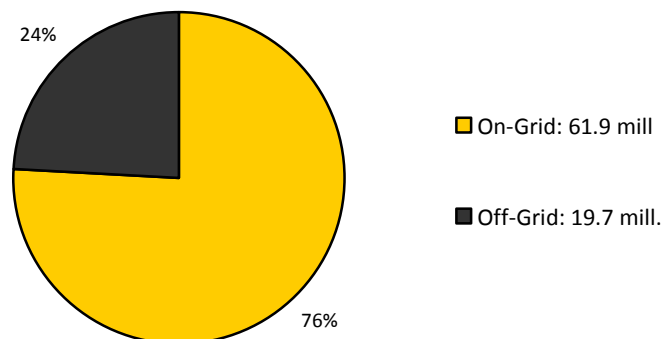
Africa



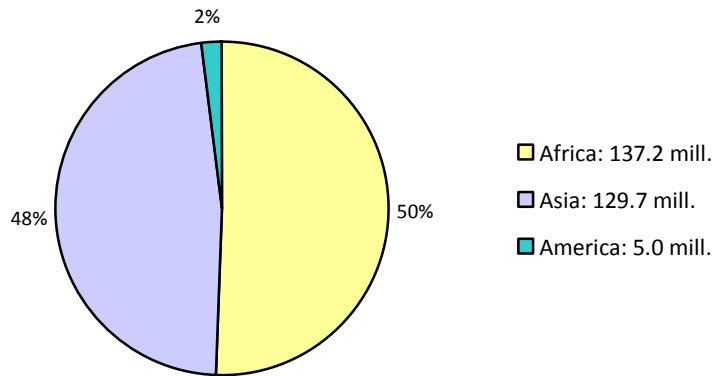
Asia



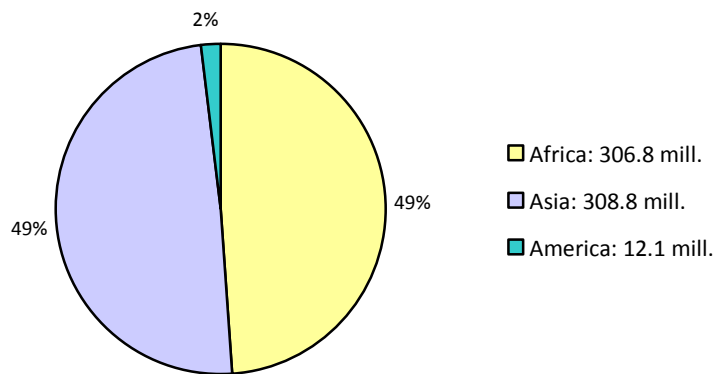
America



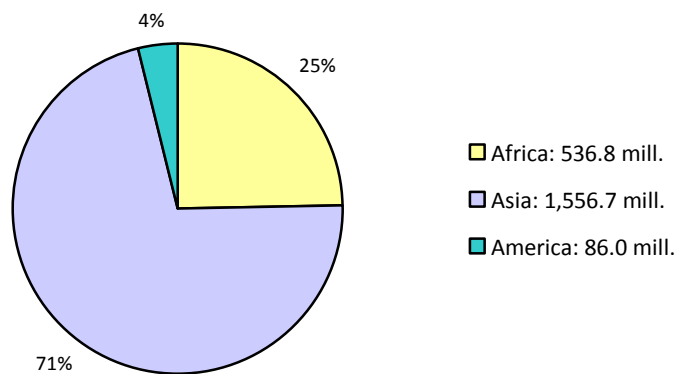
Households Off-Grid + On-Grid under-serviced: 271.9 mill.



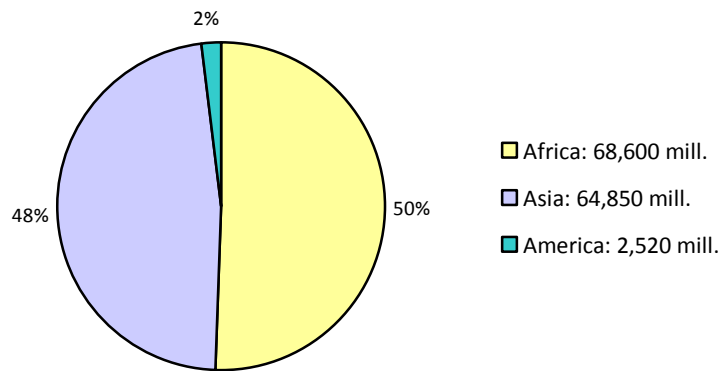
Kerosene lamps (glass cover, simple wick): 627.7 mill.



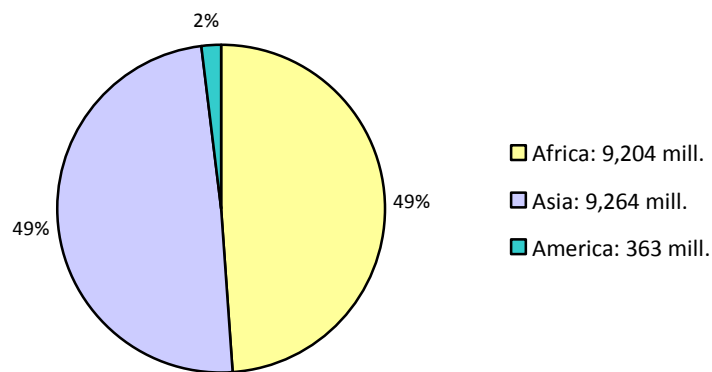
Mobile cellular subscriptions: 2,179.5 mill.



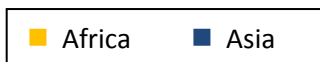
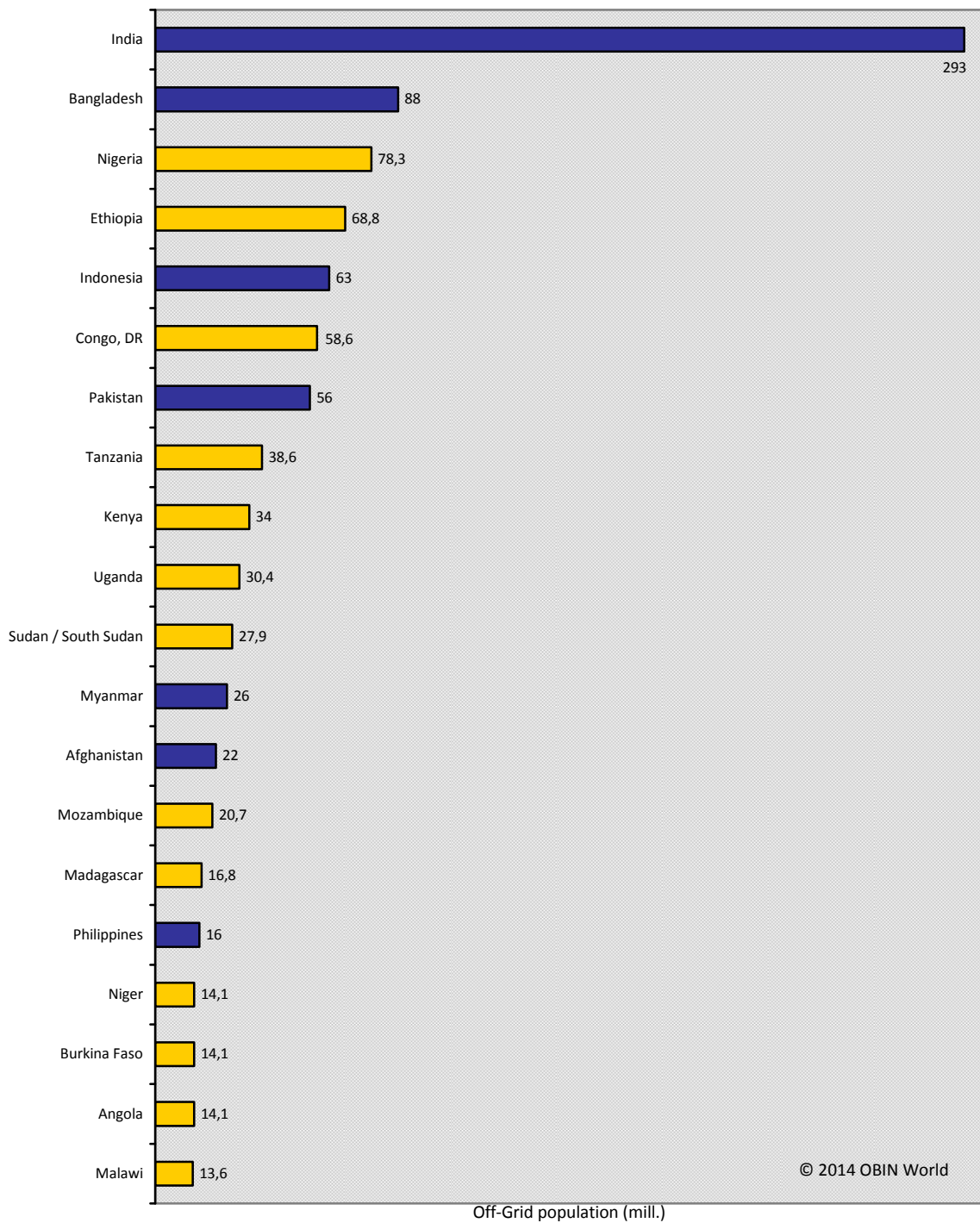
Market Potential: Electrification households: US\$ 136 bill.



Market Potential: Replacement kerosene lamps: US\$ 18.8 bill.



The 20 biggest markets



Business Environment

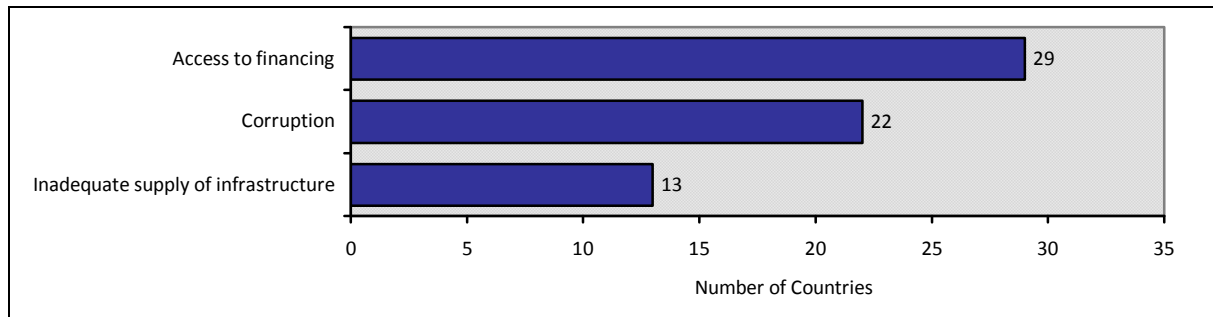
(Countries in alphabetic order)

Outstanding	Above average	Average	Below average	Unacceptable
Africa				
	Botswana South Africa	Benin Burkina Faso Cameroon Cote d'Ivoire Gabon Ghana Kenya Lesotho Madagascar Malawi Mali Mozambique Namibia Niger Nigeria Rwanda Senegal Swaziland Tanzania Uganda Zambia	Angola Burundi Central African Republic Chad Congo, Rep. Ethiopia Gambia Guinea Liberia Mauritania Sierra Leone Togo Zimbabwe	Congo, DR Eritrea
Asia				
		Bangladesh Bhutan Cambodia India Indonesia Pakistan Papua New Guinea Philippines Sri Lanka	Lao PDR Nepal Timor-Leste	Myanmar
America				
	Panama Peru	Bolivia Guatemala Guyana Honduras Nicaragua	Haiti	

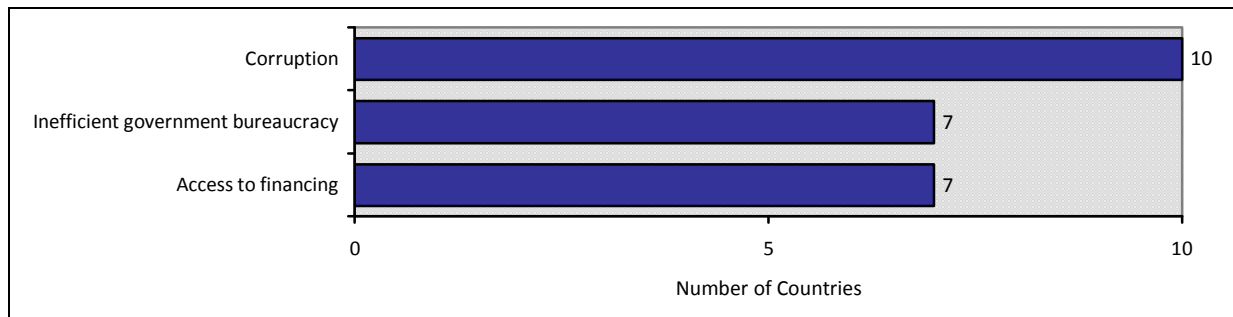
No valuation due to lack of information: Afghanistan, Djibouti, Equatorial Guinea, Guinea-Bissau, Somalia, South Sudan, Sudan

The most problematic factors for business

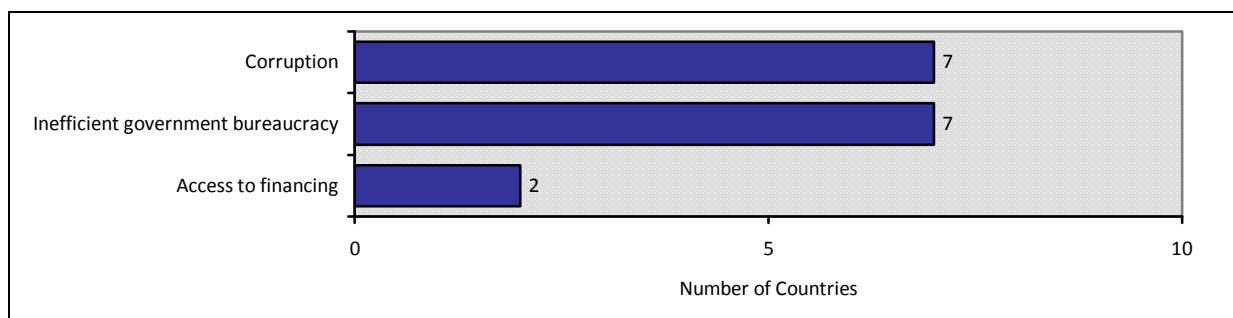
Africa



Asia



America



Source of country data: World Economic Forum, The Global Competitiveness Report 2013–2014, Geneva 2013.

Sources

- Stiftung Solarenergie - Solar Energy Foundation, OBIN. Off-Grid Business Indicator Africa, Merzhausen 2014.
- Stiftung Solarenergie - Solar Energy Foundation, OBIN. Off-Grid Business Indicator South(East) Asia, Merzhausen 2014.
- Stiftung Solarenergie - Solar Energy Foundation, OBIN. Off-Grid Business Indicator America, Merzhausen 2014.

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