



World Wind Energy Association

**Founded in July 2001 in Copenhagen, Denmark,
Head Office since July 2003 in Bonn, Germany**

The Members:

National associations, scientific institutes, companies, public bodies and individuals from **more than 100 countries** on all continents

The Aims:

Promoting the worldwide utilisation of wind energy by



being a communication platform for all wind energy actors world-wide



advising national and international policies in favour of wind energy



enhancing international technology transfer

Specialised working groups and sections, e.g. technology committee, small wind, CIS countries, legal issues, community power

 WWEA has **Special Consultative Status at UN**, and works with other international organisations



 WWEA has supported the establishment of and works closely with the **IRENA**

International Renewable Energy Alliance:

 WWEA founded the **REN Alliance** with the International Solar Energy Society, the International Geothermal Association, the International Hydropower Association and the World Bioenergy Association



A Global Paradigm Shift:

Paris has in fact defined 100 % renewable energies
as the achievable, the new normal!



Wind Energy Worldwide

Top 15 countries by total wind installations

Position 2015	Country/Region	Total capacity end 2015** [MW]	Added capacity 2015*** [MW]	Growth rate 2015 [%]	Total capacity end 2014 [MW]
1	China	148'000	32'970	29.0	114'763
2	United States	74'347	8'598	13.1	65'754
3	Germany	45'192	4'919	11.7	40'468
4	India *	24'759	2'294	10.2	22'465
5	Spain	22'987	0	0.0	22'987
6	United Kingdom	13'614	1'174	9.4	12'440
7	Canada	11'205	1'511	15.6	9'694
8	France	10'293	997	10.7	9'296
9	Italy	8'958	295	3.4	8'663
10	Brazil	8'715	2'754	46.2	5'962
11	Sweden	6'025	615	11.1	5'425
12	Poland	5'100	1'266	33.0	3'834
13	Portugal	5'079	126	2.5	4'953
14	Denmark	5'064	217	3.7	4'883
15	Turkey	4'718	955	25.4	3'763
	Rest of the World	40'800	5'000	14.0	35'799
	Total	434'856	63'690	17.2	371'374

* by november 2015

** Includes all installed wind capacity, connected and not-connected to the grid.

*** Includes the net capacity added during the year 2015.

© WWEA - 2016



Electricity generated: ~ 900 TWh

Share in global electricity demand: > 4 %

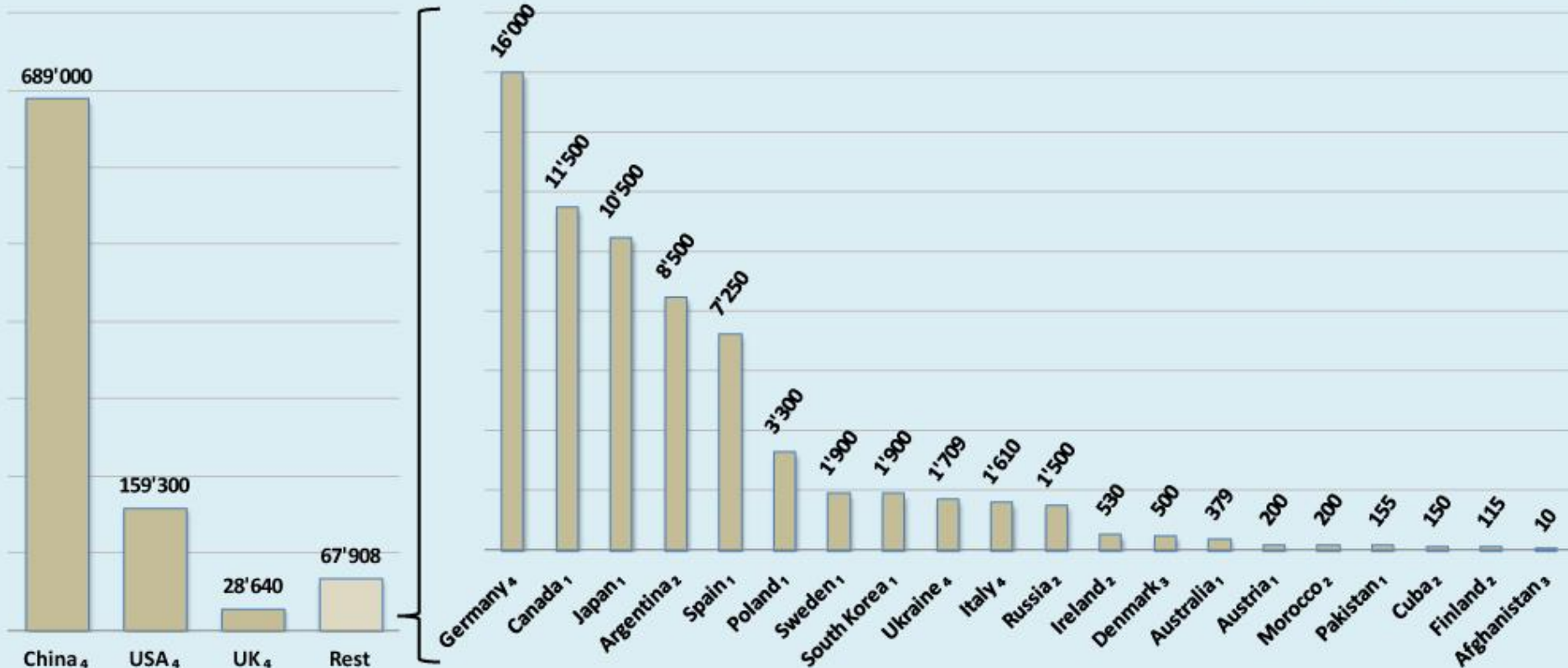
Countries with high wind shares:

Denmark	> 40 %	Scotland	41 %
Spain	21 %	Portugal	> 20 %
Uruguay	18 %	Ireland	16 %
Germany	13 %	United Kingdom	11 %

Small Wind Globally (<100 kW)

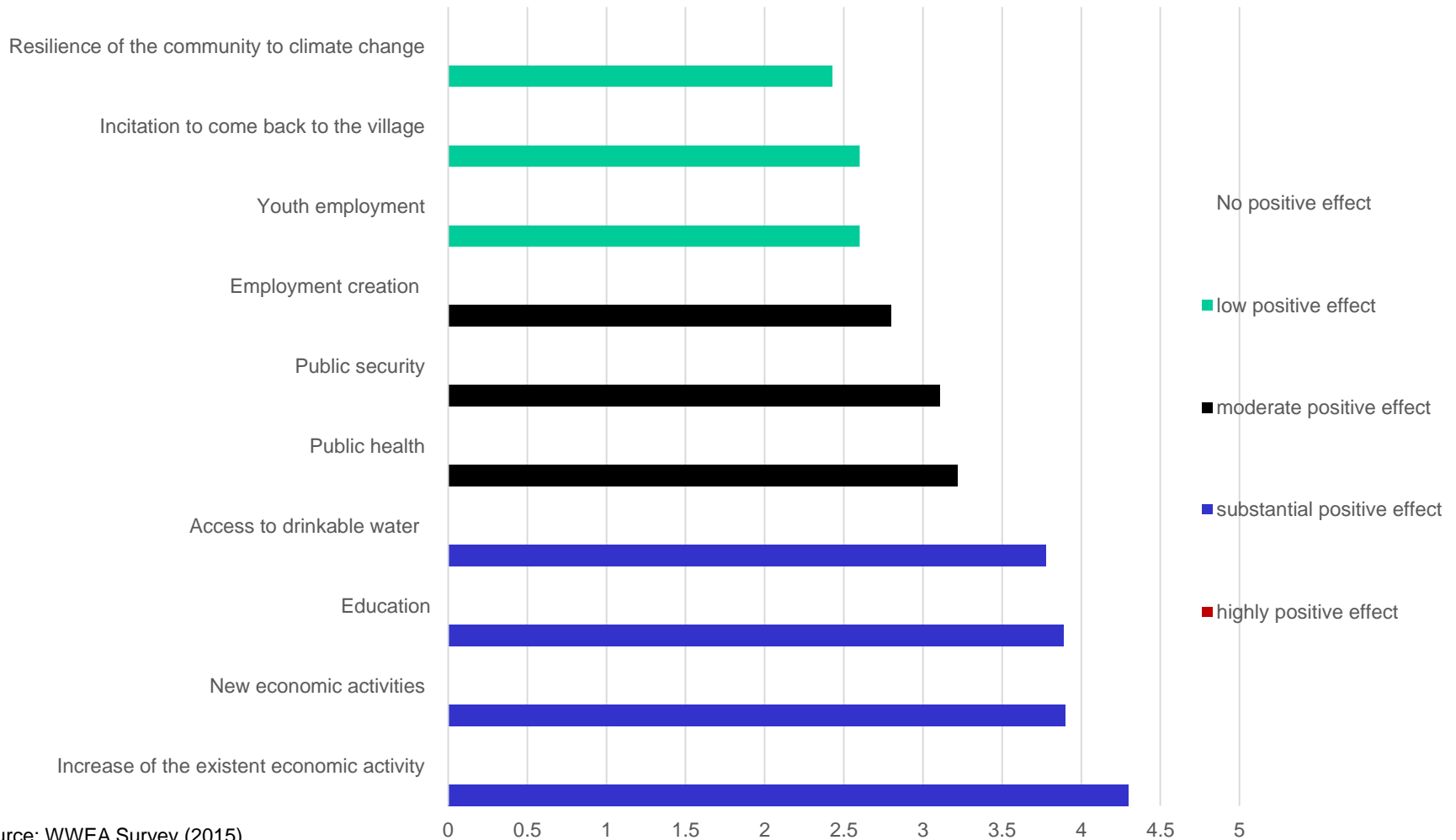
Total Cumulative Installed Units by Country

4=2014 3=2013 2=2012 1=2011



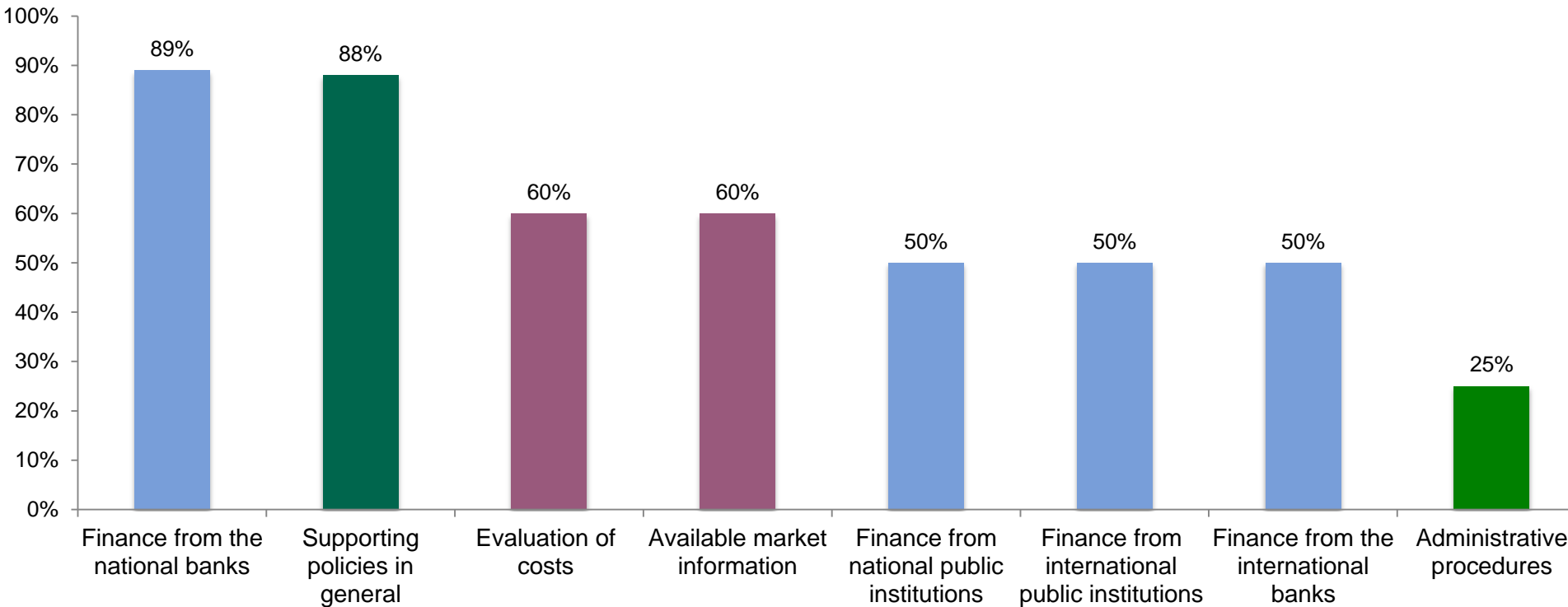
Positive Effects of Access to Power

Positive effect of the electricity availability in rural areas



Source: WWEA Survey (2015)

Barriers for Rural Hybrid Systems in Africa: Investors' Perceptions



Financial Policy

Knowledge

Administration

Source: WWEA Survey (2015)

A Key: Productive Use of Energy

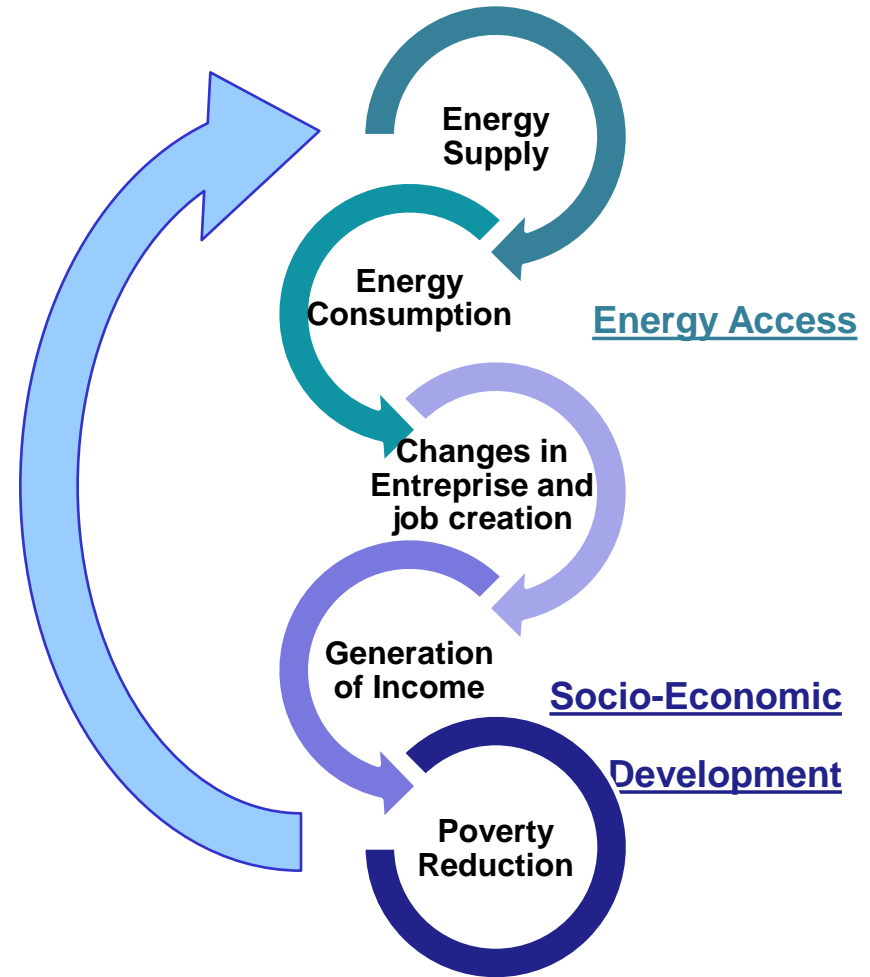
5 Steps

from

Energy Supply

to

Poverty Alleviation

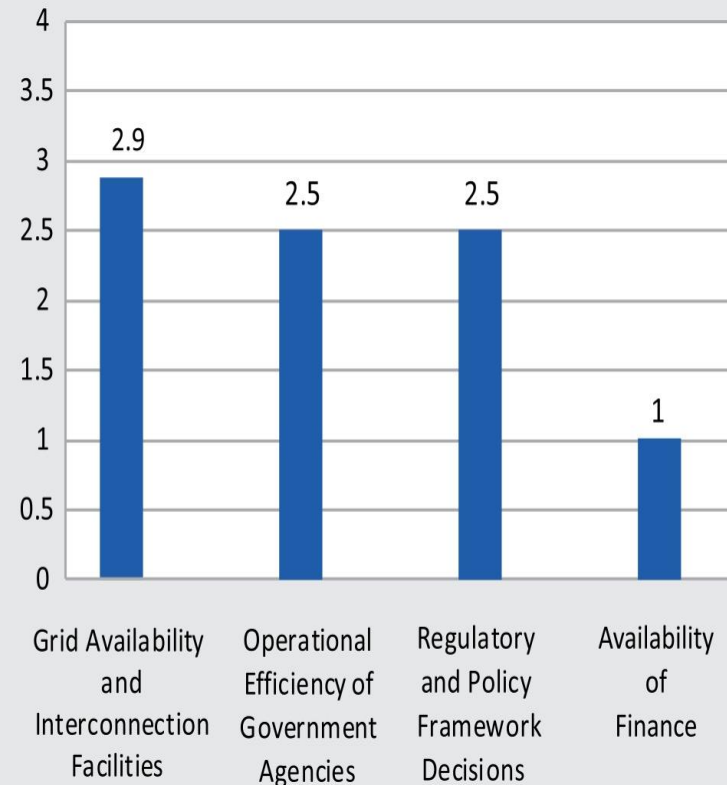
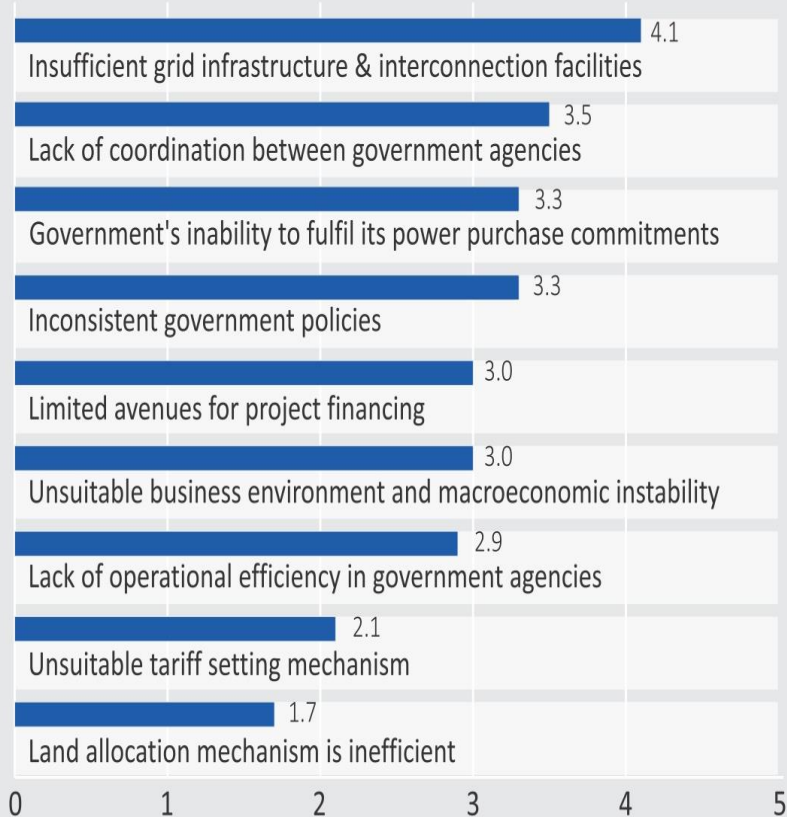


Wind Market in Pakistan: Seriousness of Barriers

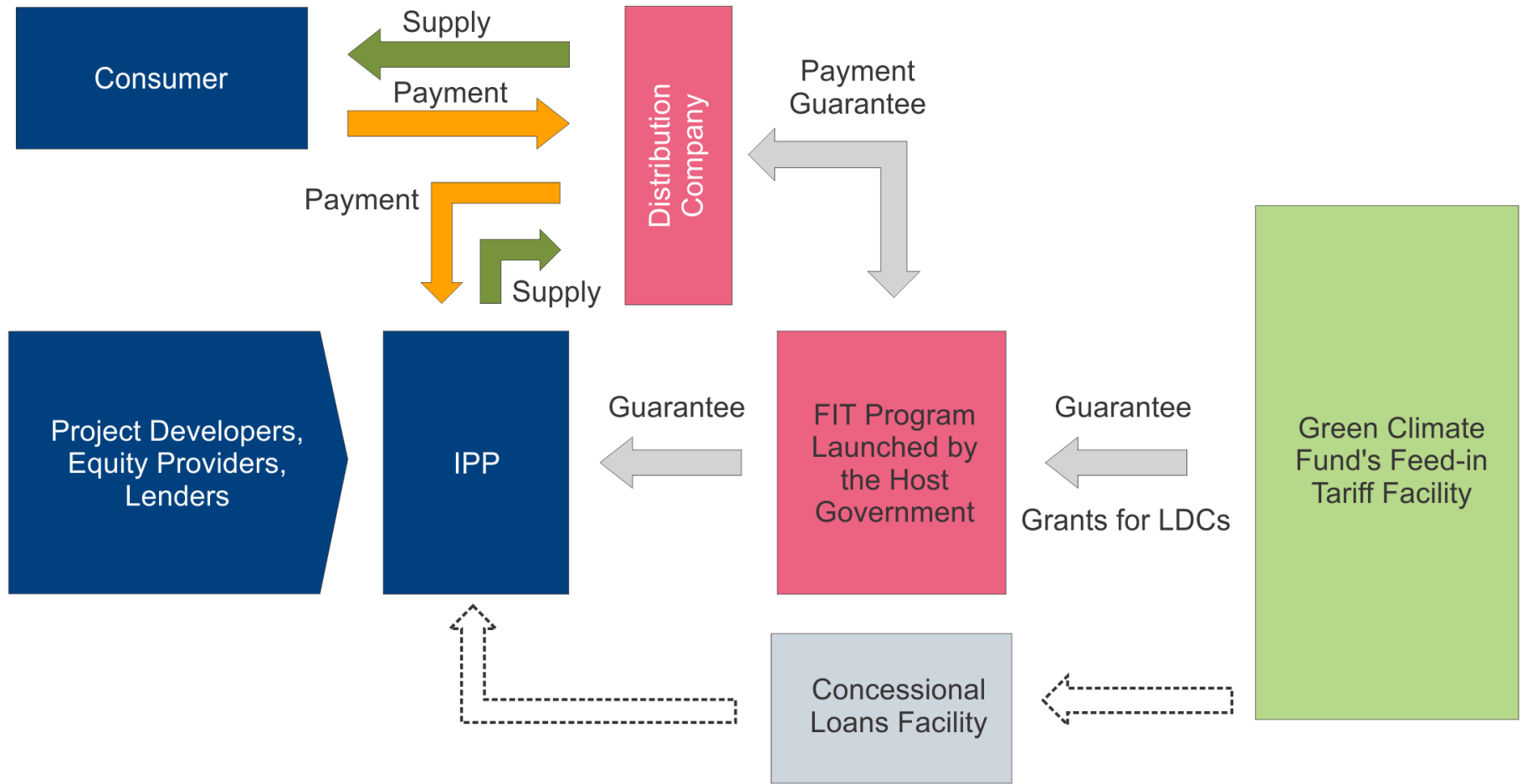
November 2014 Report

December 2015 Report

Seriousness Assessment



Finance is Key: Proposal for a Global FIT Programme



Regional and Global Community Wind Perspectives

Bonn, 26 January 2016

120 Participants from 20 countries

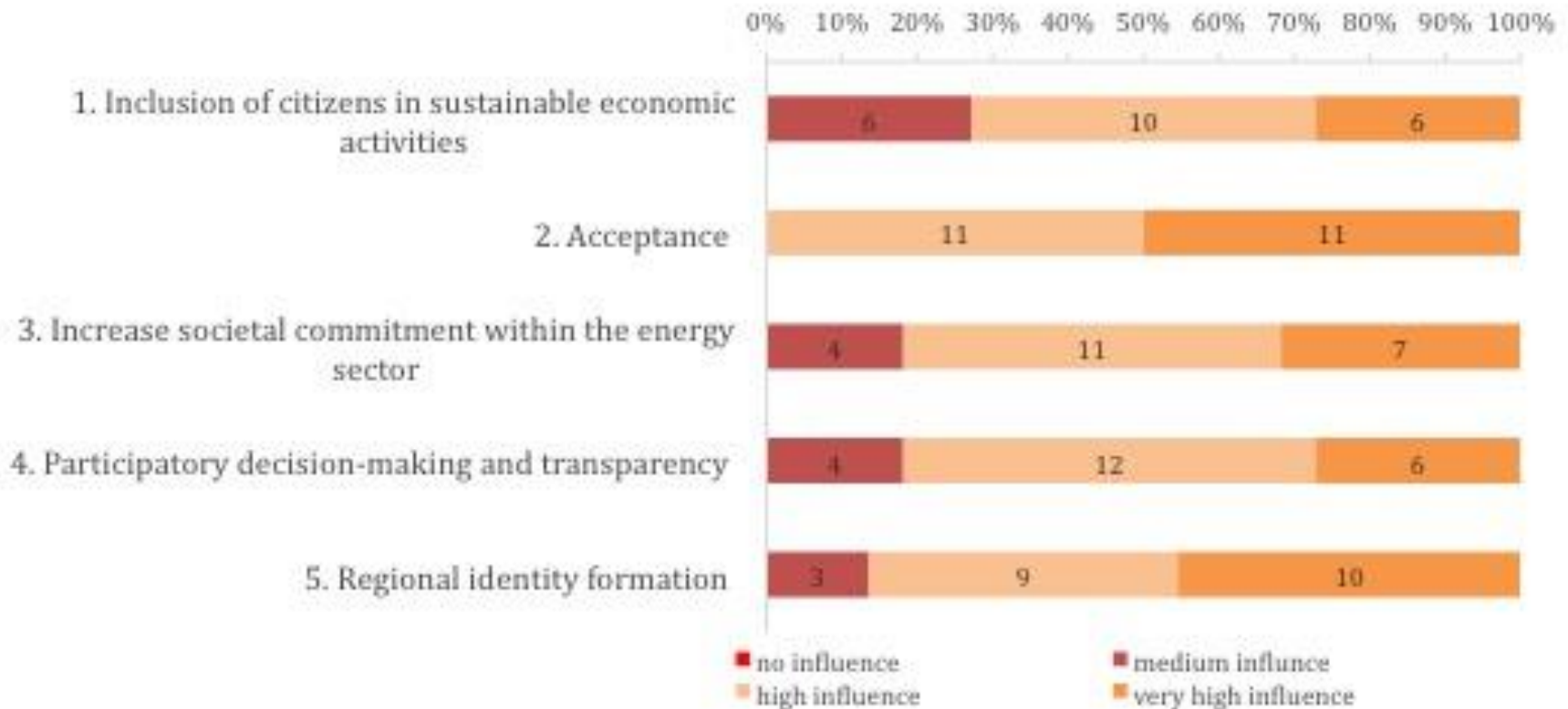
Speakers from: Australia, Belgium, Canada, Denmark, Germany, Israel, Japan, Mali, Mexico, South Africa, Spain

As well as from IRENA, European Commission, GIZ, Umweltbundesamt, World Future Council, etc.

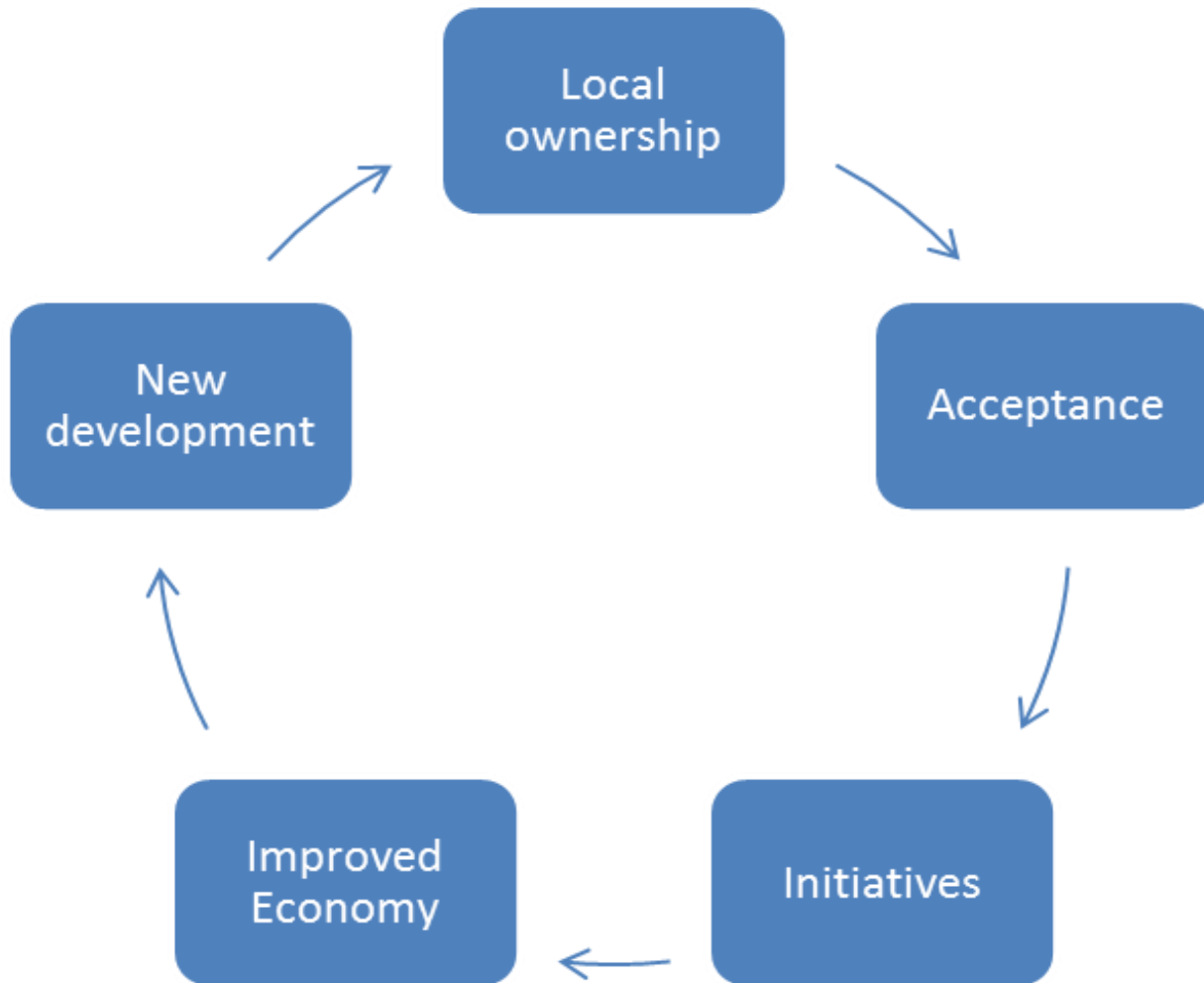


Regional and Global Community Wind Perspectives

In how far do Community Wind projects bring about the following 10 beneficial effects?
 Part 1 - Societal effects



Importance of Community Power



Summary:

- 1. Renewables are the New Normal*
- 2. Communities have to play a key role as investors*
- 3. Finance is a major barrier in developing countries*
- 4. Energy productivity must be basis for a broad strategy*
- 5. Loan guarantees can be an important tool to leverage private investment*



Thank you very much for your attention!