

The investments of Italian renewable players abroad

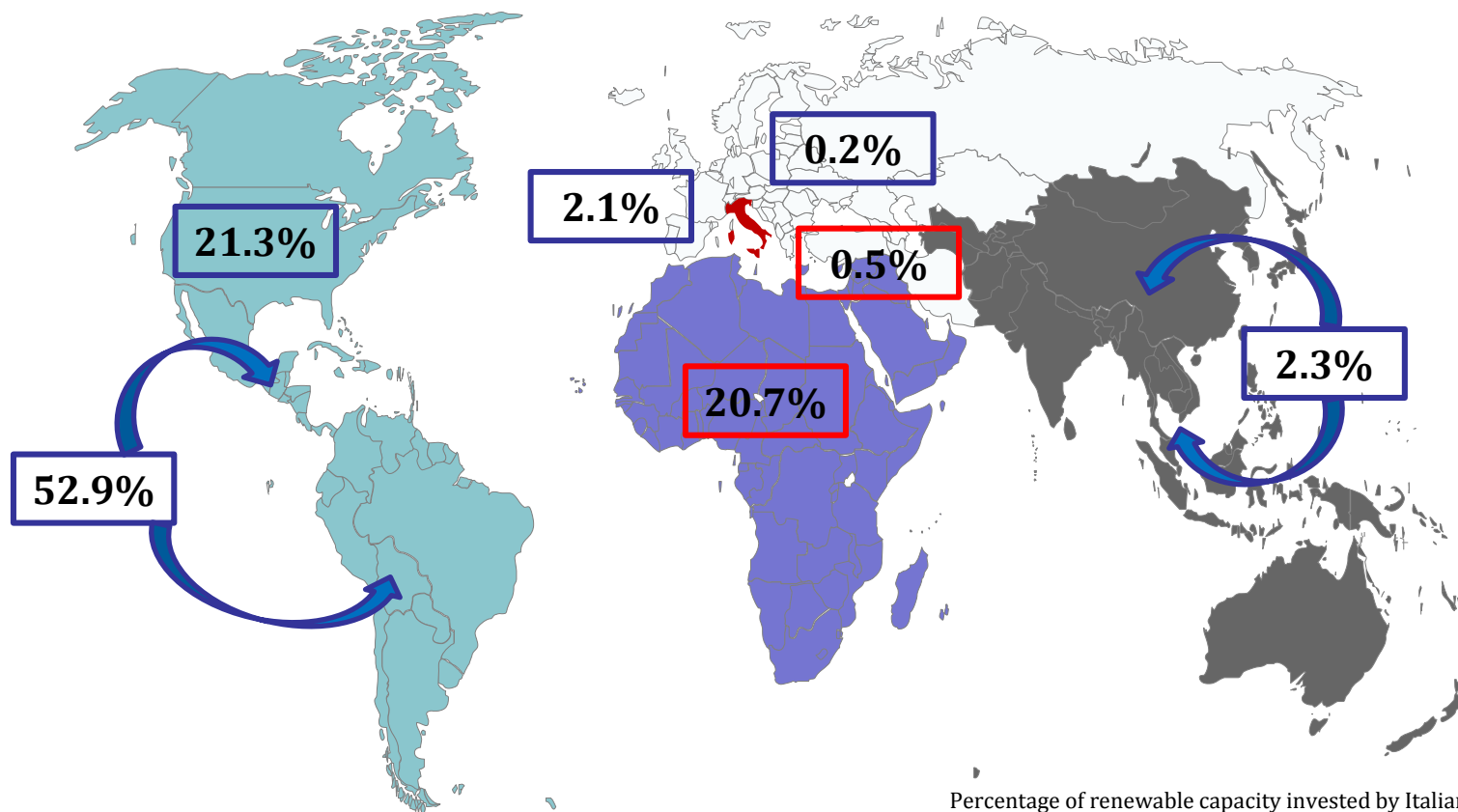
Focus on Africa and MENA Countries

Alessandro Marangoni

Milan, October 30th 2017

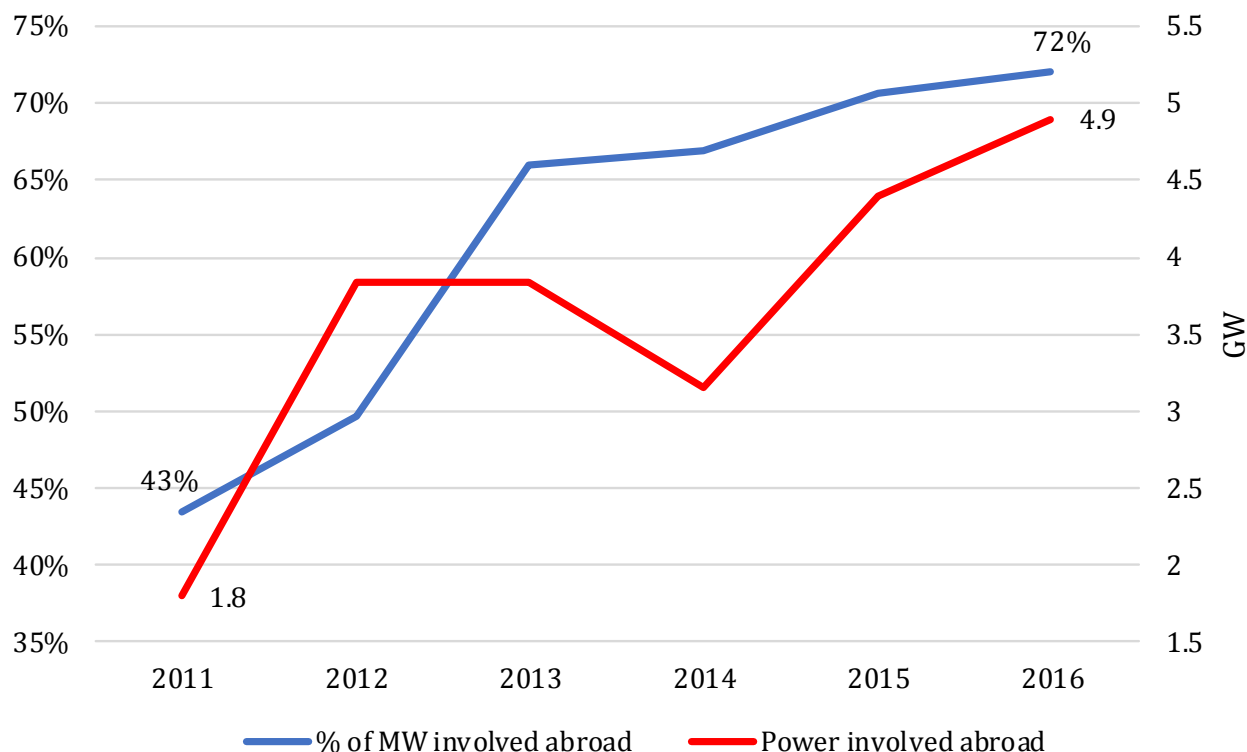
Italian RES investments all over the world

Italian renewable players in 2016 invested abroad \simeq **4.6 billion €** involving **4.9 GW** of renewable capacity



Percentage of renewable capacity invested by Italian players in 2016

Evolution of Italian RES investments abroad 2011-2016



Source: Althesys

- From 2011 to 2016 the value of investments abroad increased **+207%** passing from 1.5 bln € in 2011 to 4.6 in 2016
- Foreign Italian investments are led by large national utilities but they involve also several pure renewables and EPC

- Italian companies are investing more and more abroad
- The public policies not only boosted the domestic market, but also created an Italian value chain, now exporting competencies all over the world
- After a first step of growth mainly in (East) Europe, Italian RES companies are now investing in North and South America
- Africa has become the new frontier and it is gaining growing investments

Worldwide Italian RES investments in 2016 (% MW)

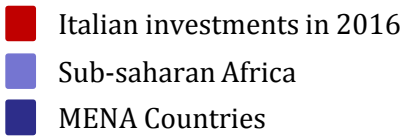
Regions	2016	2015
Central and South America	52.9%	36.2%
North America	21.3%	5.4%
Africa	20.7%	30.6%
Asia and South-East Asia	2.3%	0.0%
Old Europe	2.1%	20.6%
Middle East	0.5%	1.4%
New Europe	0.2%	5.8%

Source: Althesys

Focus on Africa and MENA Countries

Between 2014 and 2016 the Italian investments involved nearly 3.3 GW in Africa and MENA countries

- Wind power: 2,065 MW in 3 years
 - Photovoltaic: 1,217 MW in 2014-16
-
- In the last 3 years Italian players invested in Africa and MENA \simeq **3.7 billion €**
 - **Wind power is the leading technology** thanks to huge investments in big plants (avg size 344 MW), spread among Egypt, South Africa and Morocco
 - PV plants are smaller (average size 50 MW) than wind ones, but they are by far larger than the installations in Europe



- In 2016 the operations made by Italian players in Africa and in MENA Countries were located in:
 - Morocco
 - Algeria
 - Egypt
 - Jordan
 - Senegal
 - Namibia
 - Zambia
 - Mozambique
- These involved a total of $\simeq 1,000$ MW of renewable energy: 164 MW of PV and 850 MW of wind.
- The investments are worth more than 1 billion €
- The biggest operation was the project won by Enel Green Power (in JV with Nareva and Siemens Wind Power) in Morocco to build, own and operate 5 wind power projects (850 MW).

Photovoltaic new power plants in 2016

Location	MW	Investment (€)
Zambia	34	35,600,000
Senegal	44	50,000,000
Algeria	10	9,500,000*
Namibia	6	5,700,000*
Jordan	23.1	22,000,000*
Egypt	47	17,470,000**
Zambia	34	7,300,000**

* Estimated **EPC contract

- PV plants are developed by large utilities as well as by mid size EPC contractor
- The Italian PV value chain has been operating in Mena and Africa since many years and it is now more and more growing in the continent
- Some companies are establishing subsidiaries in some nations in order to boost the company investments especially in PV power plants

Africa is becoming more and more appealing

- High growth rate of energy consumption (compared to Europe), for instance: Morocco +14% (2011-2016), Egypt +6% (2013-2015)
- Present low electrification level and new development model: less grid, more RES (mobile telco model)
- Energy public policies: joining development and RES
⇒ rural electrification
- Ambitious renewable targets for MENA Countries and Africa
- High RES potential: high wind generation yield (especially Mena regions), solar high irradiation, large hydropower plants in Central_East Africa, potential for geothermal in the East Africa

- Support of international financial programs and institutions:
 - African Bank of Development (*Sustainable Energy Fund for Africa, Sustainable Energy for All – Hub for Africa, Power Africa Initiative*)
 - Africa–EU Renewable Energy Cooperation Programme
 - EU-Africa Infrastructure Trust Fund
- Markets with a number of competitors lower than in Europe, USA and Latam, but, hurry-up because Chinese are invading Africa !
- Mena achievable also by SME ...
- Africa achievable following the Italian national champions

© Copyright Althesys 2017. All rights reserved.

This paper cannot be reproduced in any form or part without written authorization.

alessandro.marangoni@althesys.com



Via Larga, 31 - 20122 Milano
Tel: +39 02 5831.9401 - Fax: +39 02 5830.1281

www.althesys.com