

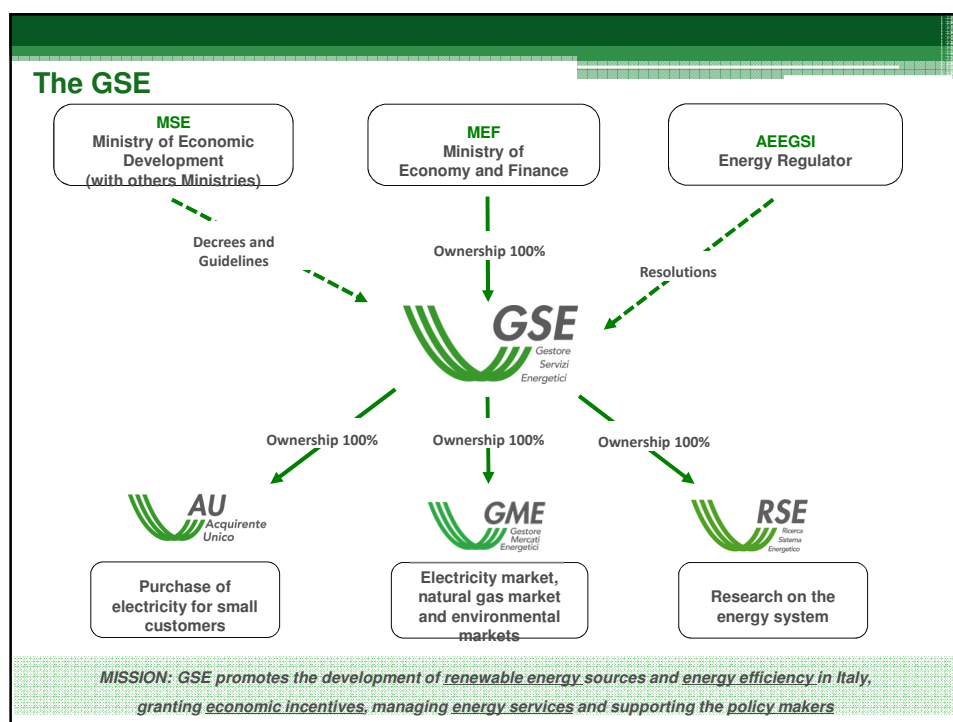
L'ESPERIENZA ITALIANA NEL SETTORE DELLE FONTI RINNOVABILI E LE OPPORTUNITÀ DI COLLABORAZIONE IN INDIA

Alberto Pela
GSE – CEO Staff



AGENDA

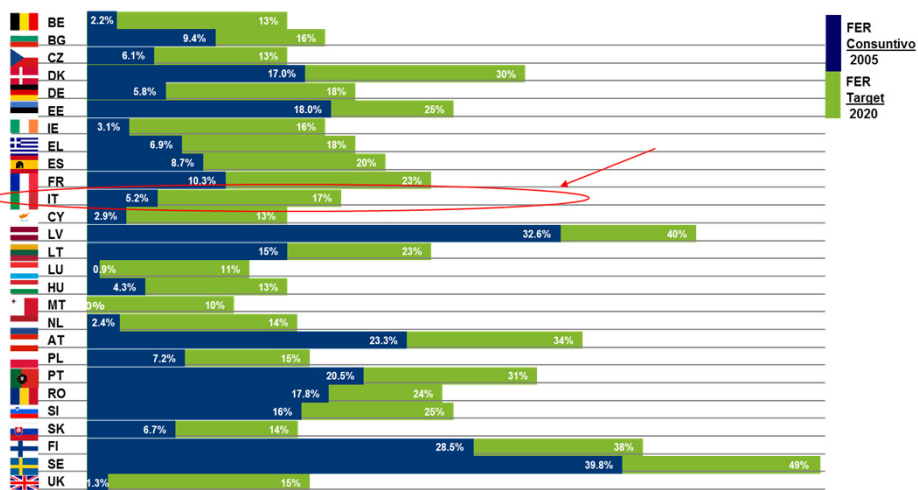
- GSE**
- THE RES DEVELOPMENT IN ITALY**
- THE ITALIAN GREEN INDUSTRY**
- GSE ACTIVITIES IN THE INDIAN MARKET**



The GSE's main activities

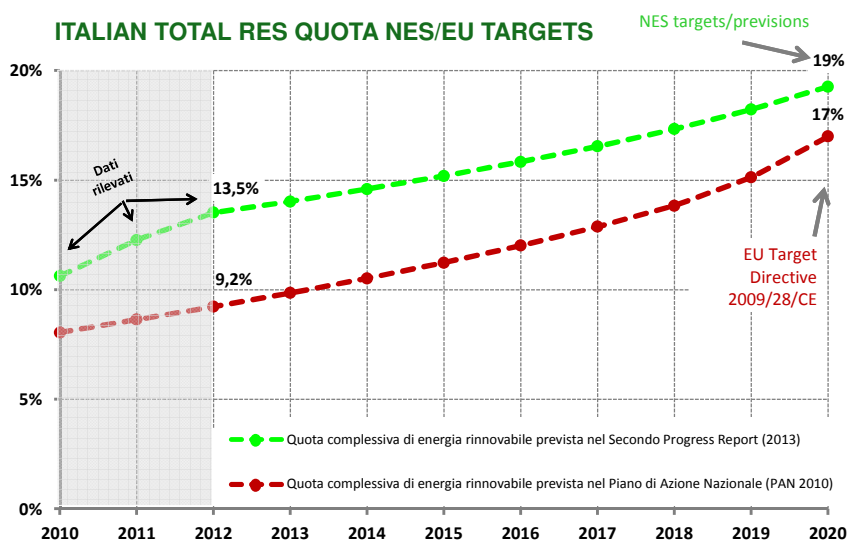
- **Management of support schemes and energy services for RES, CHP and Energy Efficiency (electricity, heating, transport):** management of dematerialized applications, plants qualification and inspection, contracting, management of measures and incentives services.
- **Energy management:** participation in the electricity market (energy withdrawn in the context of incentives/services managed), forecasting of electricity production, management of unbalancing costs, etc.
- **Studies, statistics, monitoring on RES and EE:** statistics, official monitoring reports (EU targets), analysis of economic and employment impacts, environmental effects, authorization procedures, generation costs in Italy and at international level, analysis and comparison of international policies
- **Support to institutional policy makers and public administration**
- **International activities:** participation in the main international associations (IEA, IRENA, RES4MED, etc.) and in the energy projects and studies funded (Concerted Action on RED, PV Parity, etc.)
- **Information and training:** promotion of RES and EE (workshops, reports and guides, training, etc.)
- **CO2 auctions :** we are in charge of auctioning Italian emission allowances on the European Common Auction Platform (CAP)
- **Support to Italian RES operators** ("Corrente" project) to improve, at national and international level, the Italian industrial chain visibility in the fields of renewables and energy efficiency

RES: THE EU TARGETS



GSE
Gestore Servizi Energetici

ITALIAN TOTAL RES QUOTA NES/EU TARGETS



THE RENEWABLE ENERGY DEVELOPMENT IN ITALY

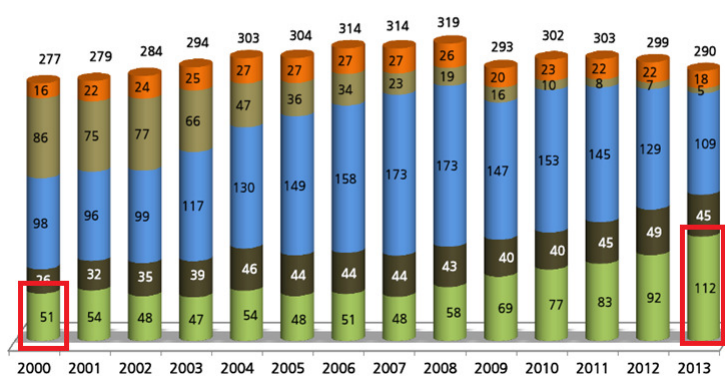


Total electricity gross generation in Italy

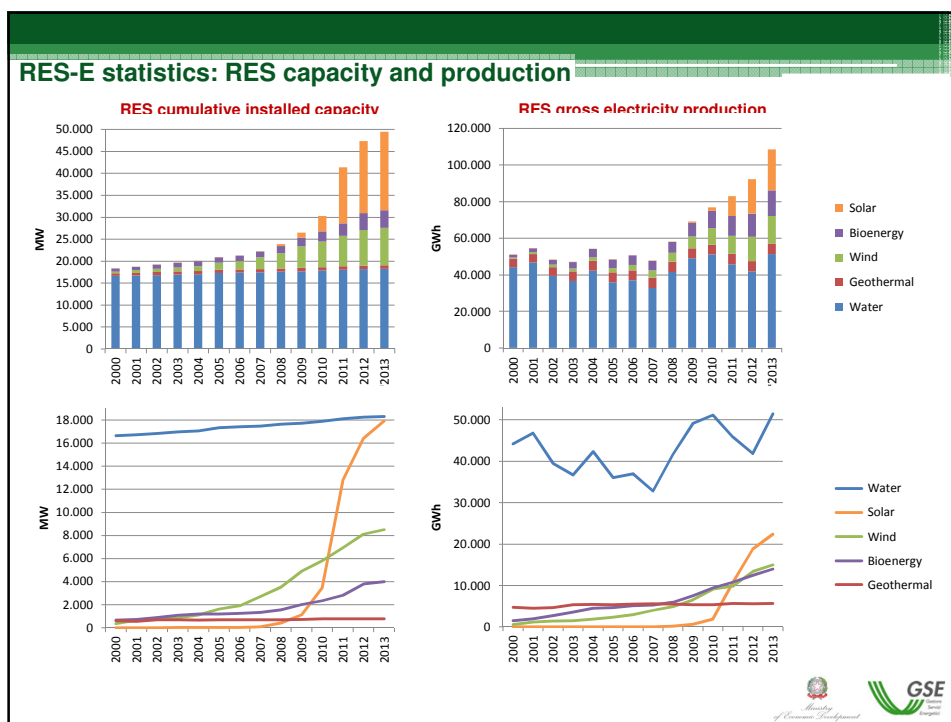
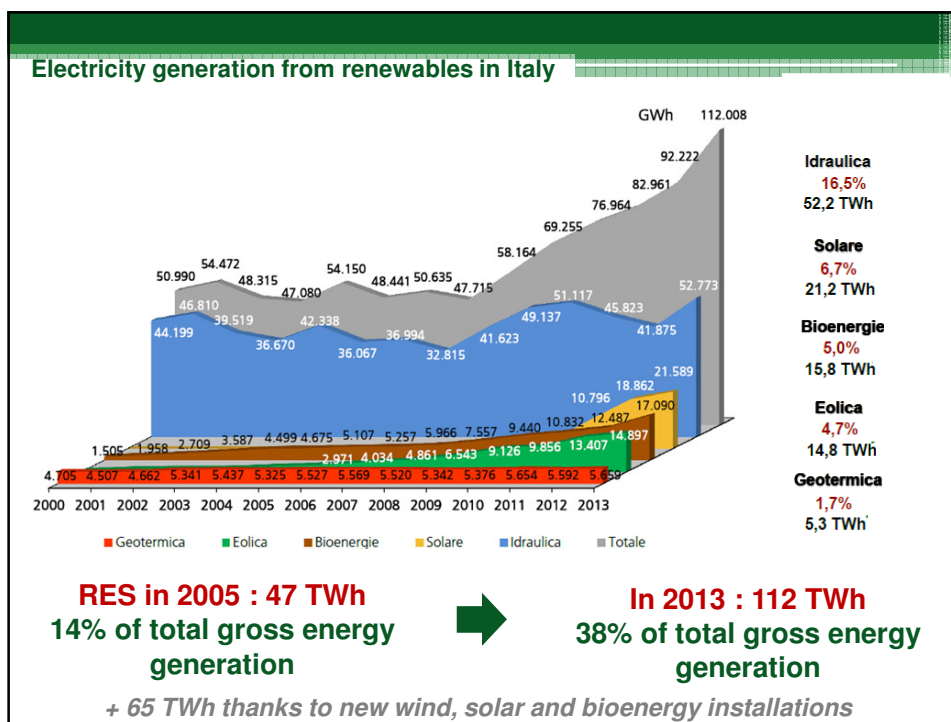


TWh

RES COAL GAS OIL OTHERS



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Prod FER/ Prod TOT %	18,4	19,5	17,0	16,0	17,9	16,0	16,1	15,2	18,2	23,7	25,5	27,4	30,8	38,6



Number and capacity of renewable power plants in Italy - 2013

Solar: 600,000 fotovoltaic plants with a capacity of 18 GW

Wind: 1,386 plants with a capacity of 8,5 GW

Bioenergy: 2,409 plants with a capacity of 4 GW

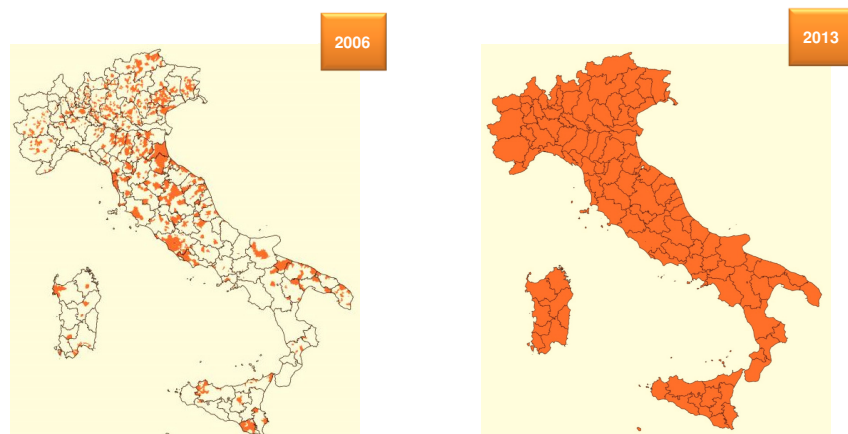
Hydro: 3,250 hydro power plants with a capacity of 18,3 GW

Geothermal: 34 geothermal plants with a capacity of 772,9 MW



Statistics RES-E : the growth of PV

PV in Italy 2006-2013



Oggi ~ nel 100% dei comuni italiani è stato installato un impianto FTV.



THE ITALIAN GREEN INDUSTRY



RES AND CLEANTECH IN ITALY



- The renewable energy strong development created a new Italian green industry with a significant business turnover offering new products and services
- The employment effects of renewable energy investment are increasingly gaining prominence in the national job market
- GSE estimates that in 2012 over 195.000 people were employed in the solar photovoltaic sector alone

The GSE Corrente Initiative



A network of **over 2050**
Italian cleantech operators

- A GSE initiative supported by the Italian Ministry of Economic Development
- Open to free-voluntary participation by Italian green companies
- Institutional partners and organizations

GSE Corrente in cooperation with the Italian institutions and sectorial partners promotes the Italian green industry:



The GSE Corrente - Website

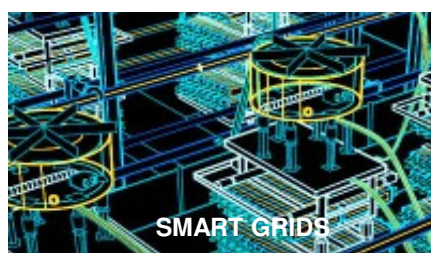
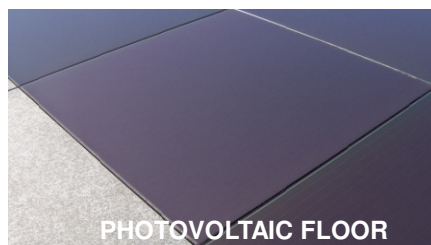
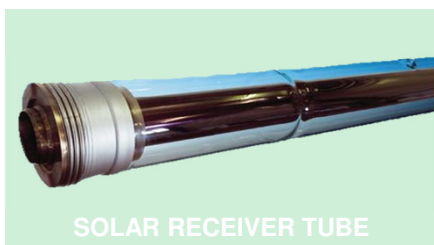


<http://corrente.gse.it>

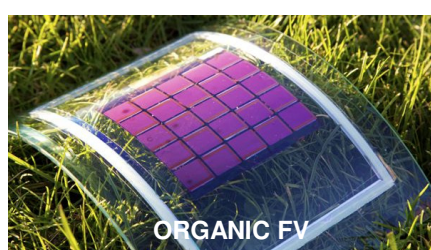
Filiere

☐	Fotovoltaico (540)
☐	Termico (288)
☐	Termodinamico (146)
☐	Concentrazione (194)
☐	Energia eolica (239)
☐	Energia idrica (145)
☐	Energia geotermica (111)
☐	Biomasse solide (185)
☐	Biogas (149)
☐	Biofuel (119)
☐	Smart grid (70)
☐	Efficienza energetica (207)
☐	
☐	Cogenerazione/Trigenerazione (30)
☐	Mobilità sostenibile (72)
☐	Altre attività (114)

Some Innovative Italian cleantech solutions



Some Innovative Italian cleantech solutions



GSE ACTIVITIES IN THE INDIAN MARKET

INDIA



- BRICS
- Incrementare produzione e accesso all'energia
- Piani di sviluppo FER
- Partecipazione CEM4 2013

INDIA

FV – capacità installata 2014: 2,5 GW

Pro:

- Sviluppo economico/energetico e alto irraggiamento
- Obiettivi Nazionali JNNSM – 20 GW ongrid + 2 GW offgrid al 2022 sia FV che CSP
- Politiche statali tramite RPO/REC

- JNNSM
 - MNRE grants
 - SECI grants
 - Feed-in-tariffs
 - Accelerated depreciation
 - Duty exemption on import of solar materials
 - RPOs
 - RECs
 - Net-metering purchase of energy production

Contro:

- Volatilità Cambio Rupia/Euro
- Accesso al credito
- Reperimento manodopera tecnica qualificata
- Complessità di sistema (burocrazia, ritardi, partner tecnici ecc..)

Statewise Installed Capacity of Solar PV Projects under Various Scheme as on 31.01.2014									
Sl. No.	State/UT	Total MNRE Projects	Other Programmes					Total Commissioned Capacity till 31.01.2014 (MW)	% Share
			State-Schemes	RPO	REC	Private Initiatives	CPSUs		
			MW	MW	MW	MW	MW		
1	Gujarat		860.4					860.4	39.0%
2	Rajasthan	493.5		40.0	133.3			666.8	30.2%
3	Maharashtra	47.0	150.0		37.3	3.0		237.3	10.7%
4	Madhya Pradesh	5.4	130.0		60.0			195.3	8.8%
5	Andhra Pradesh	46.8			46.2			92.9	4.2%
6	Tamil Nadu	16.1			15.8			31.8	1.4%
7	Karnataka	6.0	25.0					31.0	1.4%
8	Uttar Pradesh	12.4					5.0	17.4	0.8%
9	Jharkhand	16.0						16.0	0.7%
10	Orissa	13.0			2.5			15.5	0.7%
11	Punjab	9.3						9.3	0.4%
12	Haryana	7.8						7.8	0.4%
13	West Bengal	2.1	5.0					7.1	0.3%
14	Chhattisgarh	4.0			1.1			5.1	0.2%
15	Andaman & Nicobar	0.1					5.0	5.1	0.2%
16	Uttarakhand	5.1						5.1	0.2%
17	Delhi	0.9				2.1		3.0	0.1%
18	Others	1.6						1.6	0.1%
	Total	686.9	1170.4	40.0	296.0	5.1	10.0	2208	100.0%

Osservatorio GSE-ICE - INDIA

L'Osservatorio nasce con lo scopo di monitorare, presidiare e diffondere le opportunità di business nel mercato indiano e dare avvio a nuovi investimenti.

L'iniziativa :

- Promuove il settore e la filiera italiana delle fonti rinnovabili e dell'efficienza energetica in India
- Sviluppa azioni di accompagnamento delle imprese facilitando rapporti settoriali con il supporto della rete istituzionale
- Presidia, monitora e diffonde le opportunità di business offerte dal mercato indiano
- Favorisce la collaborazione tra le aziende italiane attive in loco e quelle ancora non presenti

La Newsletter dell'Osservatorio

La Newsletter dell'Osservatorio recepisce le indicazioni pervenute dalle imprese, fornendo periodicamente un approfondimento settoriale sulle opportunità cleantech in India:

Who's Who in the Indian RES:

<http://osservatoriogseicenewdelhi.wordpress.com/2013/10/29/monthly-bulletin-for-the-month-of-october-2013/>

The solar sector in India, policies and market sectors:

<http://osservatoriogseicenewdelhi.wordpress.com/2013/12/02/monthly-bulletin-for-the-month-of-november-2013/>

Solar Supply Chain & an Introduction to the Renewable Energy Project Finance Scenario in India:

<http://osservatoriogseicenewdelhi.wordpress.com/2013/12/27/monthly-bulletin-december-2013/>

Tender Process & guidelines:

<http://osservatoriogseicenewdelhi.wordpress.com/2014/02/07/monthly-report-for-january-2014/>

Database Services & Tender Scouting:

<http://osservatoriogseicenewdelhi.wordpress.com/2014/03/18/monthly-report-for-march-2014/>

List of Projects financed by the ADB in India:

<http://osservatoriogseicenewdelhi.wordpress.com/2014/04/17/monthly-report-for-april-2014/>

Announcements related to RES made in the Union Budget in July 2014, background and Impact:

<http://osservatoriogseicenewdelhi.wordpress.com/2014/07/24/monthly-report-for-july-2014/>

Iniziative Osservatorio India



2014:

EM 2014 – Nuova Delhi con MSE e MAE

5 imprese italiane partecipanti expo e roundtables

- Delhi Development Summit
- REI Expo – Nuova Delhi con ICE

Stand Italia, b2b e workshop cleantech – 10 imprese

- Roadshow Cleantech – Chennai e Bangalore con MSE, ICE, INDO ITALIAN CHAMBER OF COMMERCE, CEI Piemonte

Workshop e b2b – 5 imprese



2015:

- RE-INVEST

Stand Italia e seminari - 8 imprese

Prossima iniziativa:

- Partecipazione fiera REI 2015, 23-25 settembre 2015

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