

The European House
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In collaboration with



HANOI
HIGH LEVEL DIALOGUE
ON ASEAN ITALY
ECONOMIC RELATIONS

PRESENTATION BY LAMBERTO DAI PRA'

HIGH LEVEL DIALOGUE ON ASEAN ITALY ECONOMIC RELATIONS

Third Edition

Meliá, Hanoi

Wednesday, June 5 and Thursday, June 6, 2019

Main Partners



Partners



Technical Partners



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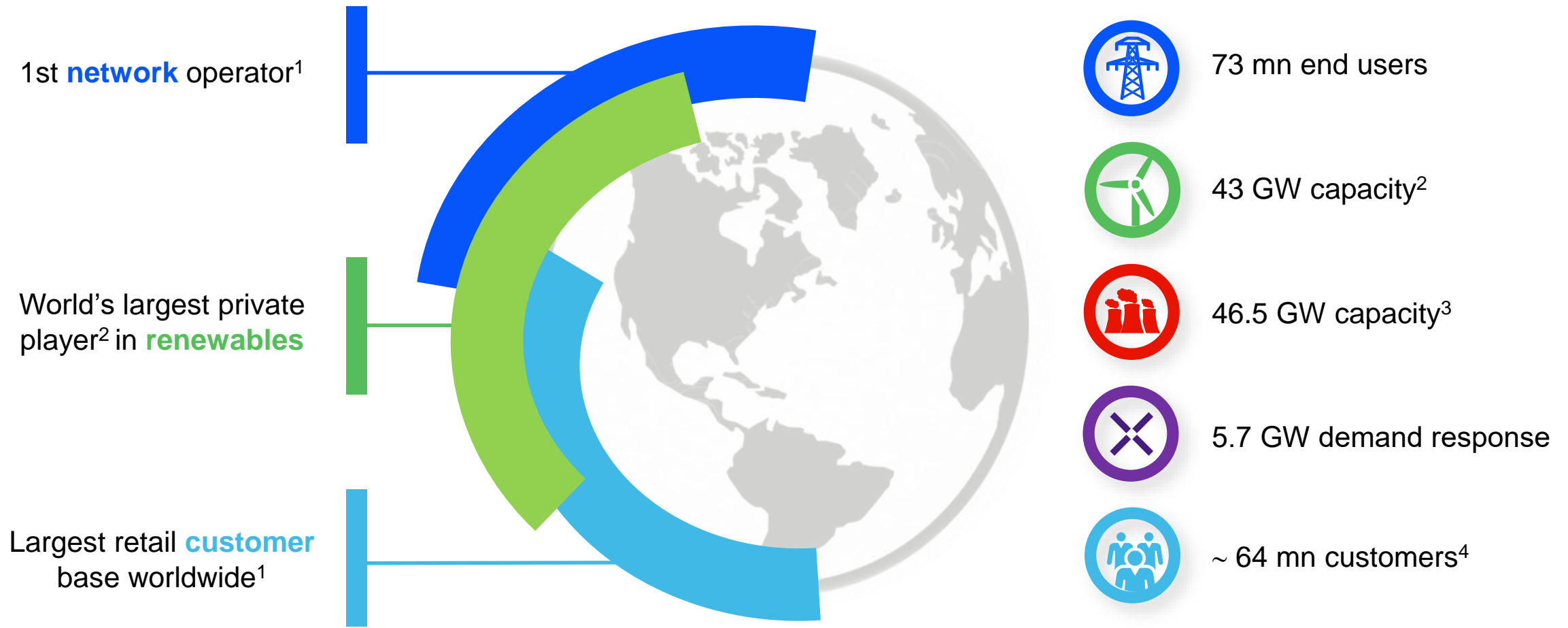


Enel Green Power

Lamberto Dai Pra'
Head of Africa, Asia and Oceania
Hanoi 6th June 2019

Enel Group Introduction

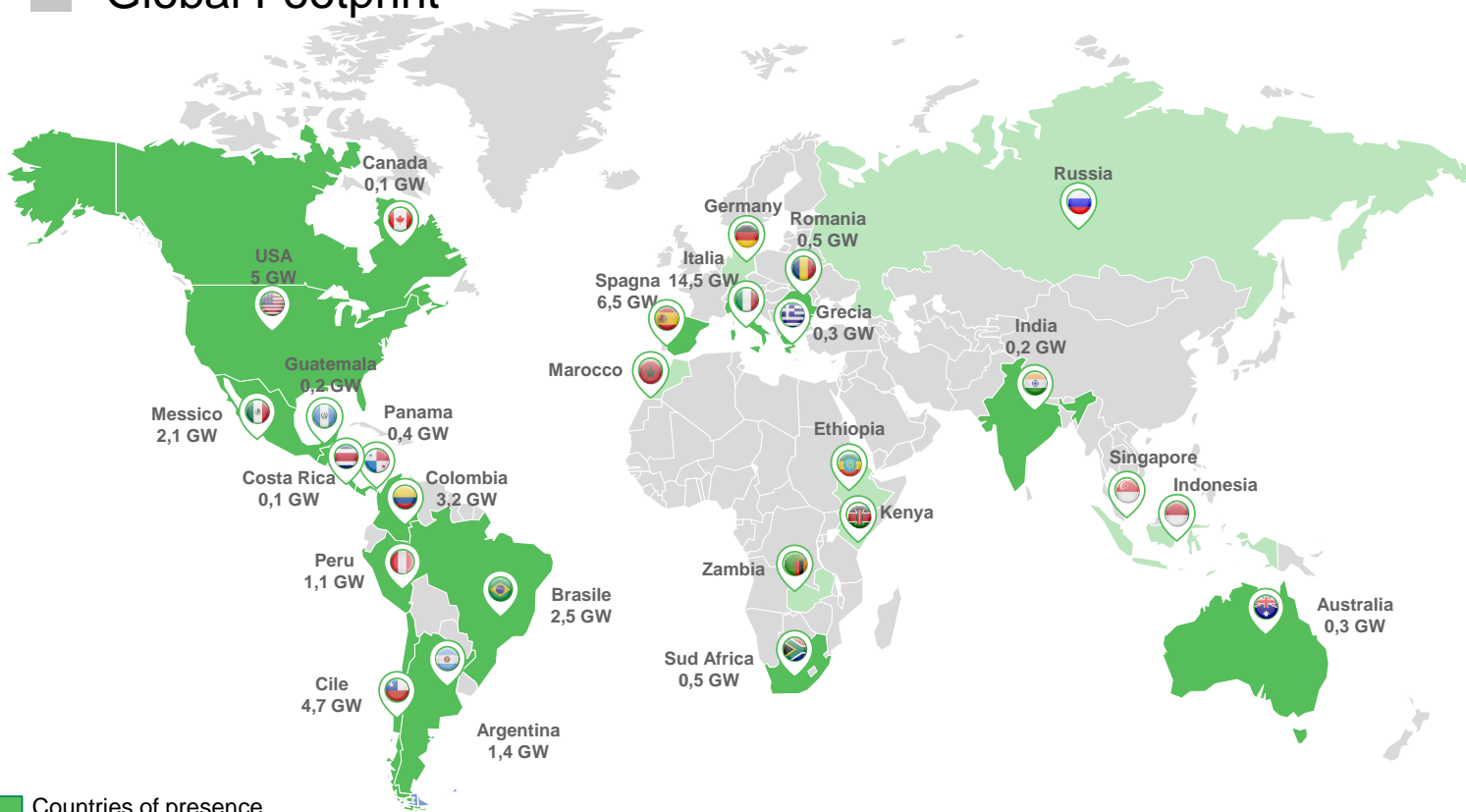
Leader in the new energy world



1. By number of customers. Publicly owned operators not included
2. By installed capacity. Includes managed capacity for 4.2 GW
3. It includes nuclear
4. Includes customers of free and regulated power and gas markets

Enel Green Power

Global Footprint



■ Countries of presence
■ Countries with advanced stage of development



Consolidated capacity (GW)	8.2	2.3	27.8	0.8
Managed capacity (GW)	10.6	3.7	28.1	0.9

Key figures 2018

Consolidated

Managed

Capacity (GW)	39.2	43.4
Production (TWh)	99.1	108.4

Key financials (€bn)

2018

EBITDA	4.5	
Opex	1.4	
Maintenance capex	0.3	
Growth capex	2.9	3.3

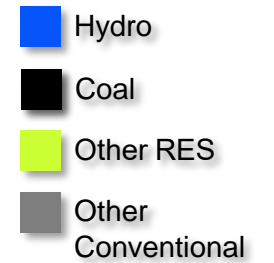
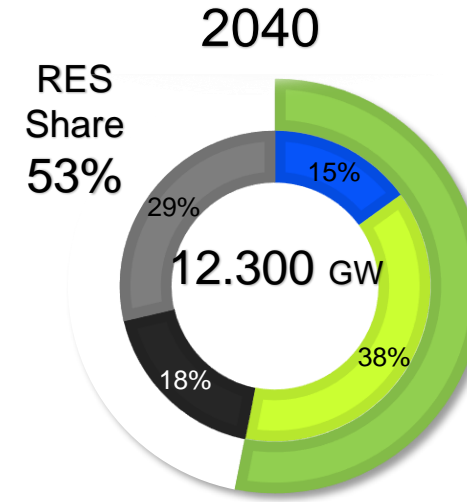
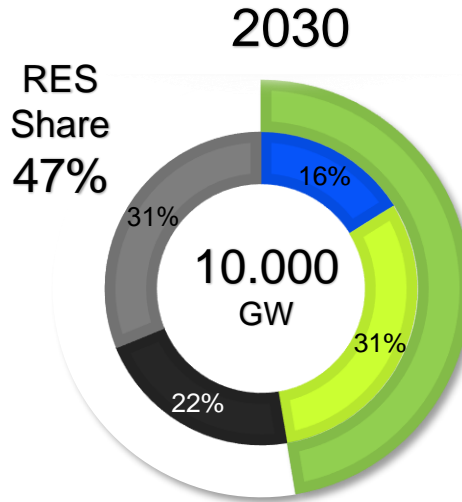
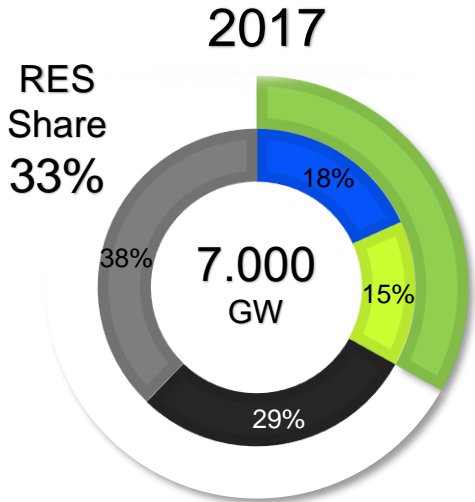
Geo Hydro Wind Solar



How the installed capacity mix will look like



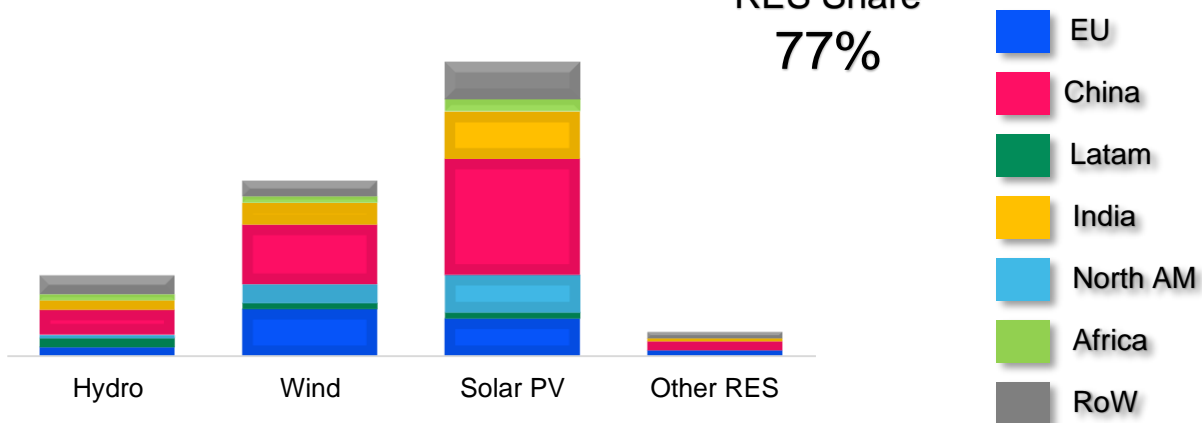
World Installed Capacity



Additional 2020-2030

1.840 GW

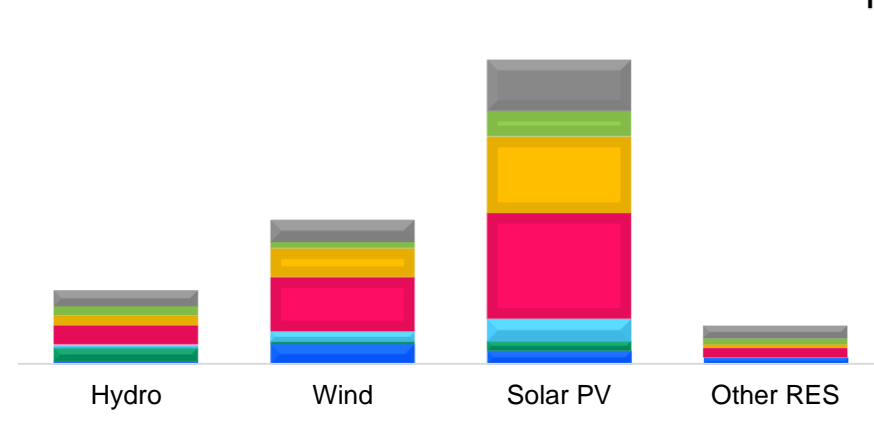
RES Share **77%**



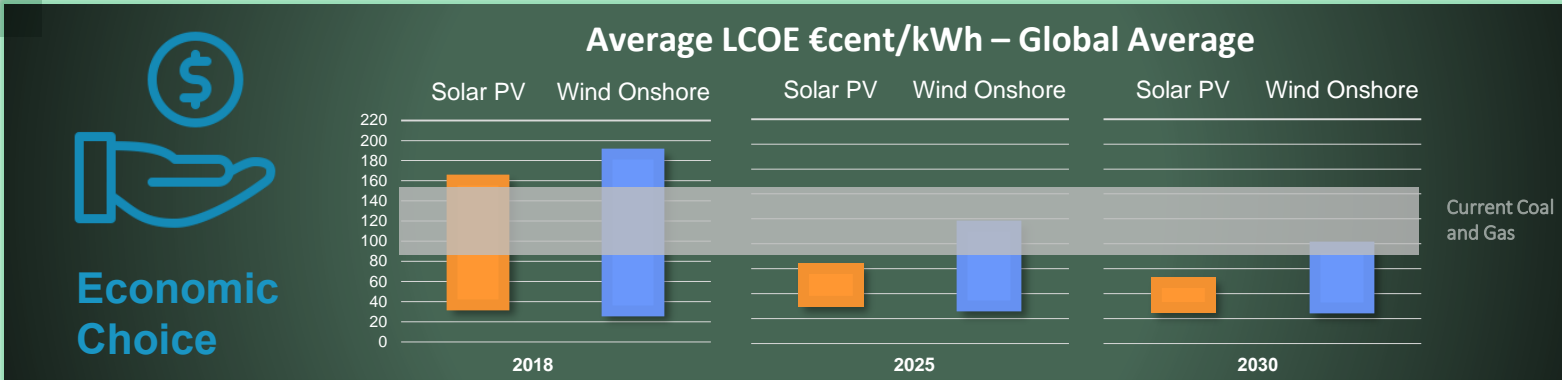
Additional 2030-2040

1.750 GW

RES Share **76%**



Renewables - What is behind this growth?



Economic Choice

Easiest to do

PV & Wind 8 ÷ 12 months	Coal 40 ÷ 60 months
CCGT 16 ÷ 20 months (open cycle) 26 ÷ 30 months (closed cycle)	Nuclear 120+ months

Necessary For Environment

	1.5°C	2°C	2°C vs 1,5°C
EXTREME HEAT	14%	37%	2.6x worse
SEA-ICE-FREE ARCTIC	AT LEAST 1 EVERY 100 YEARS	AT LEAST 1 EVERY 10 YEARS	10x worse
SEA LEVEL RISE	0.40 METERS	0.46 METERS	.06M MORE

Who is leading the transition



Conscious and sustainable value chain



Innovative and sustainable growth



Wise and sustainable energy strategy

Enel Green Power's technologies



EGP is focused on Mature Technologies...

Technology Focus: Proven Renewables



Wind Onshore



Solar Photovoltaic



Geothermal Energy



Hydroelectric



Biomass

...and investigates Innovative Solutions

Innovation: the key to compete



Storage



Offgrid systems



Hybrid Solutions



Floating PV

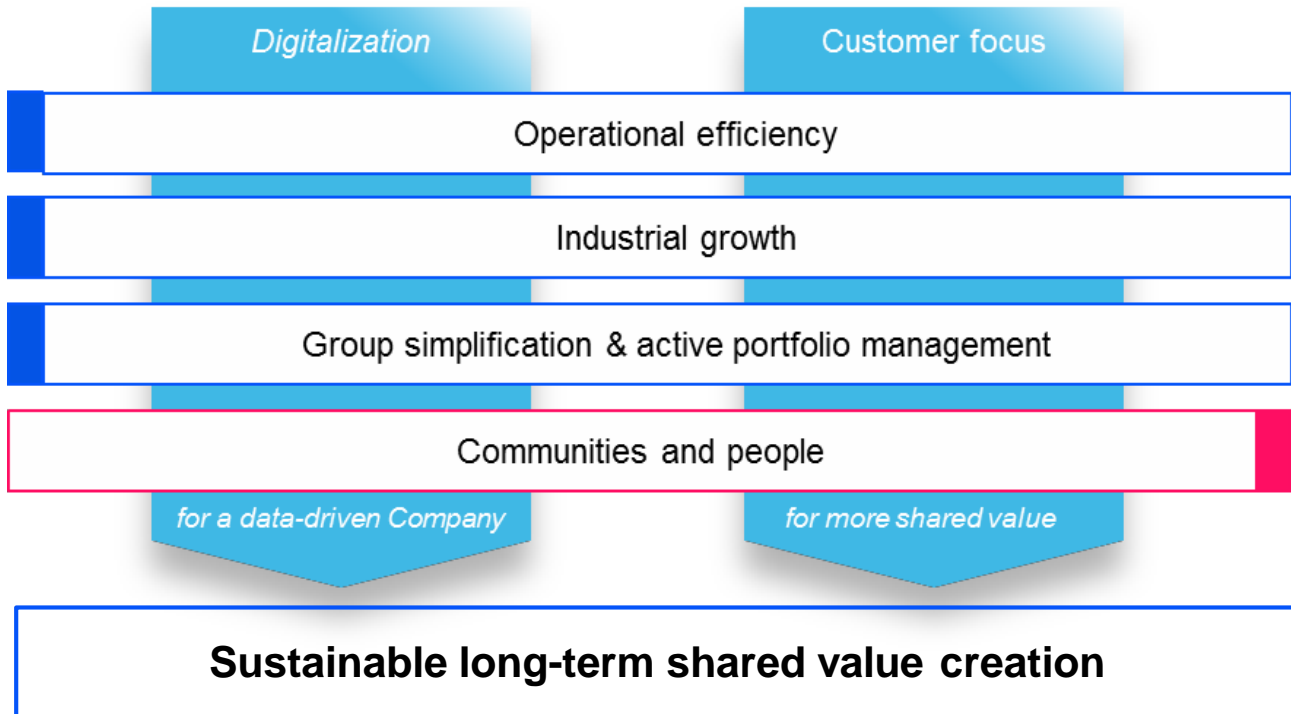


Marine Energy

Sustainability as a part of the Enel Strategic Plan



2018-2020 Strategic Plan



Enel commitments to the Sustainable Development Goals

<p>4 QUALITY EDUCATION</p>	800,000 people by 2020 ¹
<p>7 AFFORDABLE AND CLEAN ENERGY</p>	3 million of people, mainly in Africa, Asia and Latin America by 2020
<p>8 DECENT WORK AND ECONOMIC GROWTH</p>	3 million people by 2020 ²
<p>13 CLIMATE ACTION</p>	<350 gCO ₂ eq / kWh by 2020 (-25% base year 2007)

1. Target was upgraded from 0.4 mln people commitment, reached 2017
 2. Target upgraded 2 times, from 0.5 mln people reached in 2016 to 1.5 mln people commitment that was achieved during 2017

Enel Green Power

Sustainability



SUS Plant

Sustainability
pillars full implementation



SUS Construction Site



SUS Building



Nexus water, food, energy
CSV projects
in emerging countries



Partnership with
multilateral organizations

The Enel Green Power **sustainable** ecosystem

Local Communities

NGO and Social Enterprises



To extend CSV across the Company boundaries,
widening our ecosystem

Clients

Suppliers




+ Sustainable Finance



Focus on Asia & Pacific


- Country of presence
- Country under development
- Offices: ~ 90 employees

 172 MW operation
285 MW under construction
Wind

Gurgaon
(New Delhi)
Bangalore

 55 MW
Geo

Singapore
Jakarta

 275 MW operation
34 MW under construction
Solar PV

Sidney



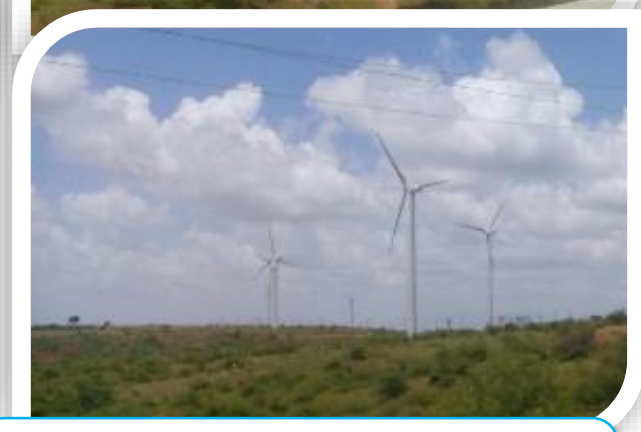
India wind power plants



Vayu1 150 MW
Wind - Gujarat



Amberi 12 MW
Wind - Maharashtra



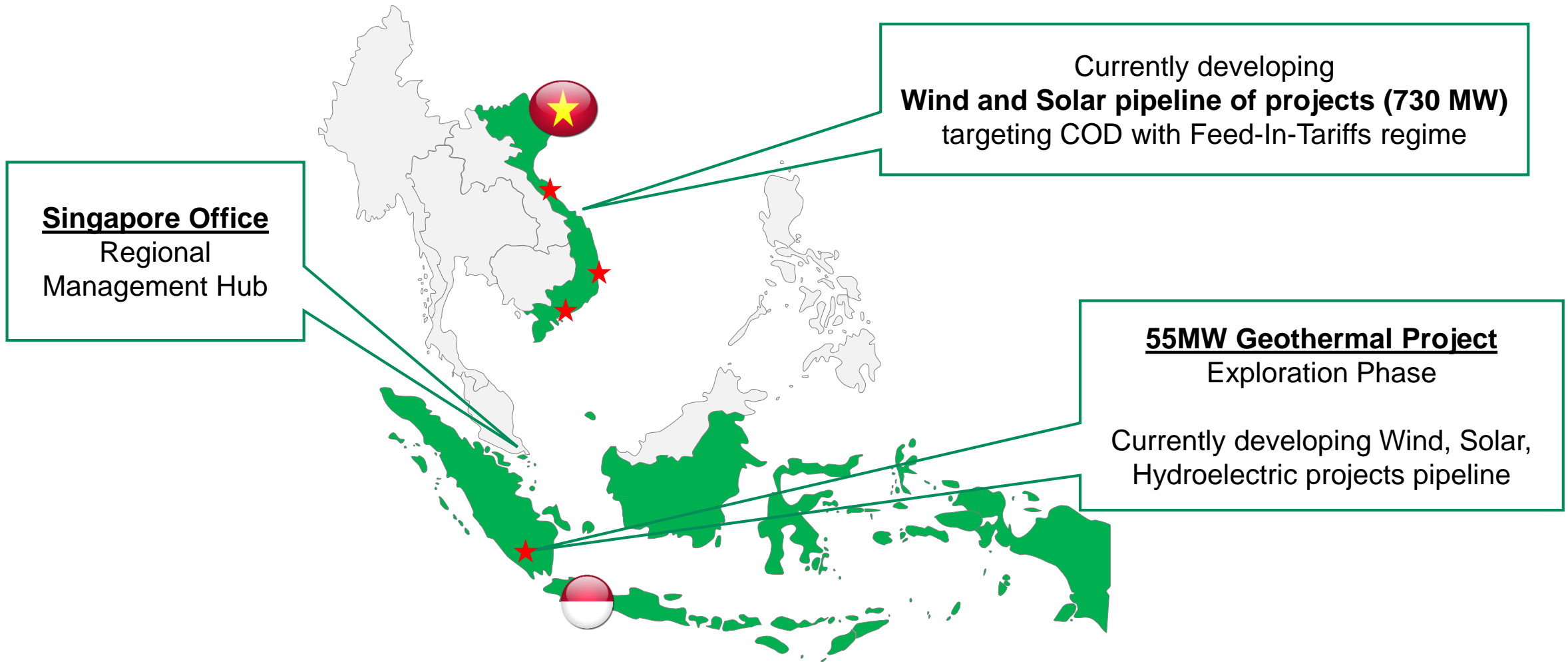
Jath 10.2MW
Wind - Maharashtra

Australia: Bungala PV Project 275 MW

Total investment 315 MUSD



Enel Green Power presence in ASEAN



Singapore Office
Regional
Management Hub

Currently developing
Wind and Solar pipeline of projects (730 MW)
targeting COD with Feed-In-Tariffs regime

55MW Geothermal Project
Exploration Phase
Currently developing Wind, Solar,
Hydroelectric projects pipeline



Thank you