

■ You need commitment and power to grow your business.  
And you need the **right partner** at your side



**enel**  
Green Power



## Presenting **Enel Green Power**

At Enel Green Power we believe there's a renewable energy solution for every business.

All of our projects are built on **sustainability, innovation and a proactive approach** to create **shared value for ourselves and the communities we serve**.

Our commitment is to offer personalized, 100% sustainable energy solutions. When businesses invest in sustainability, **we're the partner they turn to**.



Our **environment**: our **power**

**28.1 GW**  
Hydroelectric



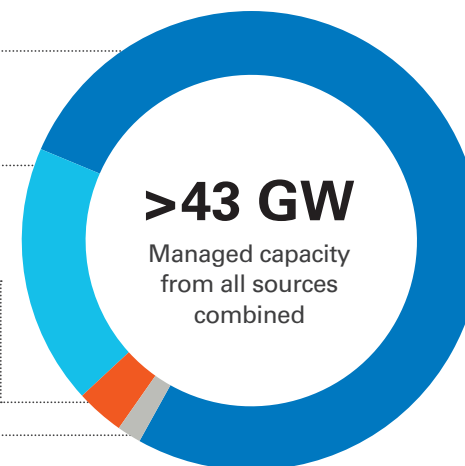
**10.6 GW**  
Wind



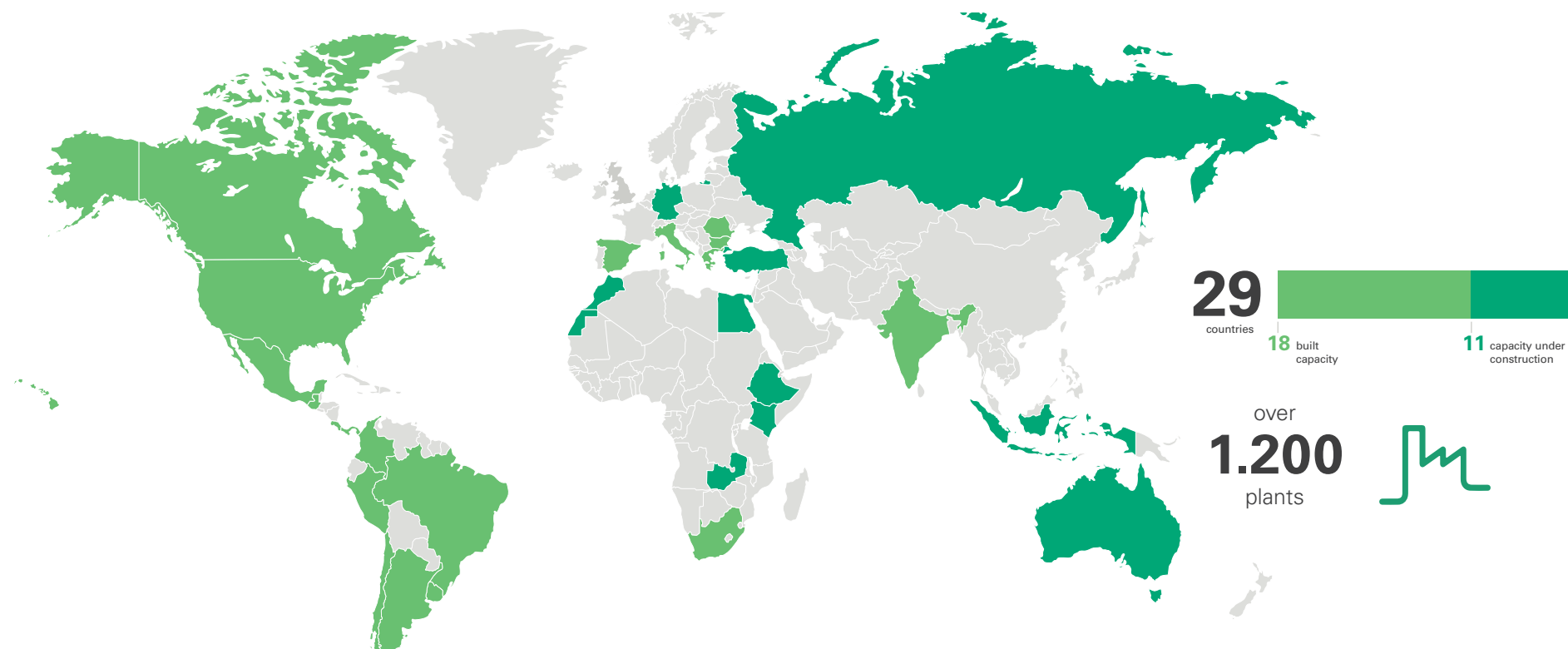
**3.7 GW**  
Solar



**0.9 GW**  
Geothermal



## Enel Green Power around the world



## Five production technologies around the world



### WIND

The leading resource in our portfolio and a constantly-growing asset.



### SOLAR

We play an increasingly significant role in the solar power market all around the world.



### HYDROELECTRIC

We specialize in small and medium hydroelectric projects.



### GEOTHERMAL

Our leadership in this sector brings special benefits for us and our clients.



### STORAGE

Our strength is in our ability to develop energy storage systems.

## Key ingredients for a winning business model



Technological  
and geographic  
diversification and an  
optimized value chain



**21 GW  
40 COUNTRIES**

### PROJECT DEVELOPMENT

- A portfolio of high-quality projects
- Strategic alliances and co-development agreements

### HOW WE BEGIN

### COMMERCIAL STRUCTURE

- Made-to-measure solutions to the needs of the client



**5 GW IN PPA**



**FIP  
AWARD**

### PROJECT FINANCING

- Access to finance at competitive rates
- Attractive alternatives for the sector's financial players

### HOW WE PROCEED

### ENGINEERING AND CONSTRUCTION

- Design to value for higher returns and lower costs



**3 GW  
CONSTRUCTED  
IN 2018**



**100 TWH  
PRODUCTION**

### OPERATION AND MAINTENANCE

- Big data and predictive maintenance
- Excellent performance at reduced cost

### HOW WE SUPPLY

### ENERGY MANAGEMENT

- Integrated portfolio management (multi-technology generation/retail/trading)



**FORECASTING  
TOOLS AND  
BIG DATA  
MANAGEMENT**



## Three main competitive advantages

### We offer tailored solutions

- Flexible PPA packages
- Energy portfolio management
- Risk management
- Sustainability strategies for tertiary and industrial clients, including Creating Shared Value (CSV) projects around the world

### We are world leaders in renewable energy

- 100% renewable energy sources
- Involvement with local communities
- Operating excellence
- Geographic and technological diversification
- Economies of scale
- Competitive financing rates

### We break performance records

- Key markets are booming, a portfolio of high-quality projects
- Awarded capacity has increased 15-fold in five years
- The Western world's record for built capacity in 2017: 2 GW in a single year





## Sustainability is the key

Enel Green Power's **development strategy** is driven by the increasing integration of sustainability.

For us, sustainability is not a question of reacting to crisis: it's more a proactive approach to **identifying opportunities and creating shared value for company and community**. Our activity is based on **dialogue with stakeholders and socio-environmental surveys which** identify the actions **best suited to local needs and corporate objectives**.

By adopting a sustainability model based on the creation of shared value (CSV), we can pursue our own strategy without losing sight of the needs and commercial objectives of stakeholders.

Application of the CSV **model across the whole value chain** has created new best practice benchmarks and new opportunities for company, communities and the environment. It's also allowed us to identify one-off practices which have now become common company policy, and that makes our way of **doing business more sustainable all the time**: out in the field where we're building and operating power plants, and back in our offices.

The focus is always the same: measuring performance (and therefore impact), adjusting it to counter residual impacts that are impossible to mitigate.

And that applies to all the areas where **we can make a difference: emissions, waste, water and human resources**.

Enel Green Power is listed in all the **leading sustainability indexes**

Since  
**2002**



FTSE4Good

MEMBER OF  
**Dow Jones  
Sustainability Indices**  
In Collaboration with RobecoSAM

Since  
**2004**

Since  
**2005**



Since  
**2007**

Since  
**2013**



Since  
**2014**

## Objectives of sustainable development: working together for a better world

The commitment of the Enel Group to increased sustainability is embodied in its undertaking to pursue the **17 Sustainable Development Goals announced by the United Nations** in September 2015. **We make an active contribution to the pursuit of 4 of these goals:**



### 7. AFFORDABLE AND CLEAN ENERGY

**3 million** beneficiaries by 2020, mainly in Africa, Asia and Latin America

### 8. DECENT WORK AND ECONOMIC GROWTH

**1.5 million** beneficiaries by 2020 (instead of 500,000)

### 13. CLIMATE ACTION

**<350** gCO<sub>2</sub>/KWh<sub>eq</sub> by 2020, a science-based target

### 4. QUALITY EDUCATION

**400.000** beneficiaries by 2020

## Our commitment to sustainability



**625** projects all over the world



**736,500** beneficiaries



**28** million USD in investments

**2018**



## Cerro Pabellón (CHILE): South America's first geothermal plant. A case study in sustainability



### The plant in figures:

- A 48 MW geothermal plant, the first in South America
- The first geothermal plant built at this altitude
- Operational since March 2017



### Its location:

- Located 4,500 metres above sea level in the Atacama desert
- The local inhabitants are **Quechua and Atacameña**



### The issues:

- The population lacks access to even the most basic infrastructure and the local environment has been damaged by mining



### The result:

- The project articulated a number of initiatives drawing on the participation of the local communities and focussing on solutions to the socio-economic issues they face. A number of environmental targets were also set in an effort to lessen the impact of the project on the community and the environment



### A sustainable project

Like all our projects, Cerro Pabellón had to be sustainable. The **environmental** goals we set ourselves for this project were:

- **total carbon neutralization**
- **15% reduction in water consumption**
- **re-use or recycle 20% of waste**

Some of our goals were socio-economic in character. We contracted local SMEs (small and medium enterprises) to contribute their services to the project:

#### Cleaning services

**11**

employees



#### Laundry

**7**

employees  
(6 women)



#### News kiosk

**3**

employees



#### Breakfast services

**4**

employees  
(3 men)



#### Transport

**5**

employees  
(3 men)



#### Community supervision

**17**

employees



The **value created** both internally and externally was analysed by an impact assessment tool developed by our company and based on certain financial indicators.





## Power Purchase Agreements (PPA): for the medium and long terms

**Thanks to PPAs, businesses, government agencies and schools and colleges can buy electricity with no initial outlay.**

The client buys the electricity- not the plant that generates it.

A bilateral financial agreement is the best way to enjoy the benefits of renewable energy without having to build, own or manage an installation.

## Adapting to corporate needs

Our **flexible** corporate solutions are designed to **meet the specific needs of business clients in terms** of duration, products, volume, profile, price, commitment etc. If you want us to build an electricity production plant in or near your own **installations**, we can offer a series of solutions to your needs.

That's what we can do for you at **Enel Green Power**.

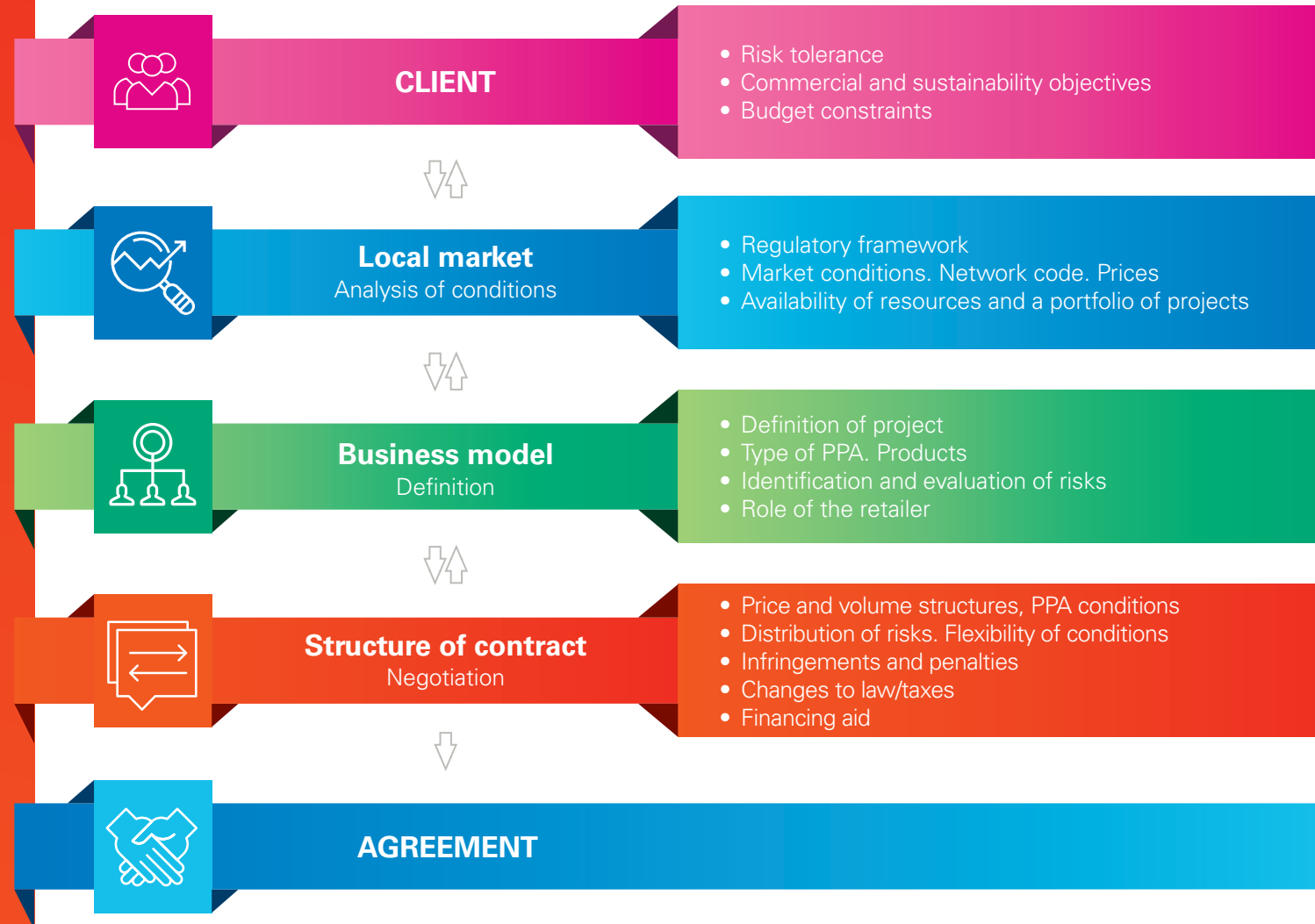




Enel Green Power's **bilateral alliance policy is based on the client**

PPAs form part of a robust electrical energy supply strategy.

- Balancing budget risk against commercial risk in a sustainable fashion
- Reducing our carbon footprint
- Protecting ourselves against volatility in the electricity prices and renewable energy certificate (REC) markets
- Creating shared value



## The **principal advantages** of a PPA with Enel Green Power



### Affordable

Corporate PPAs work like a long-term insurance policy to protect against price volatility. And generating energy from renewable sources avoids exposure to carbon-related risks.

- Guaranteed prices for up to 30 years
- No capital investment
- No extra costs
- No maintenance costs or maintenance-related headaches



### Sustainable

There are two reasons why most business sign a PPA: first, to meet sustainability goals and combat the greenhouse effect; second, to secure protection against volatility in electricity prices.

- Advantages for local communities and other stakeholders
- Reduced carbon emissions at global level
- Enhanced brand image
- Sustainable commercial practice
- Active, global participation in the fight to save the environment



### Reliable

The combination of improved energy efficiency and renewable solutions is a guarantee of lasting supply and a gateway to significant financial incentives.

- A safe, reliable and lasting energy supply
- No risk of energy shortages
- Diversification- a mix of sources





**Enel Group:** one provider,  
many solutions

**We offer tailored solutions...**

**...to meet the needs of our clients**



**Market  
& Trade**

- Coverage
- Structured products
- Access to market



**Risk**

- Regulatory risk •
- Price volatility in the bulk market •
- Carbon price risk •



**Enel  
Green Power**

- Supply from existing portfolio
- Off-site renewable energy (remote installations)
- PPA (financial/physical)
- Package (energy + certificates)
- Joint investment
- In situ renewable energy
- Hybrid (+ storage)
- Off-grid solutions



**Improved  
sustainability**

- Risk to reputation
- Authorizations/social licences
- Reduced emissions Scope 1, 2, 3
- Options (not just certificates)
- Renewable additionality
- Efficiency



**Evolution &  
Technology**

- Behind the meter systems (BTM)
- Demand management solutions
- Energy efficiency



**Reduced  
costs**

- Price flexibility and safety •
- Competitiveness •

**We are the best energy partner our clients could wish for, because we try...**

**...to make their business stronger by maximizing the value of clean energy**

**PPA:** medium- and long-term agreements for strategic alliances

## Physical, on site PPA

Our renewable energy plants are **developed, built and operated on your property**. The energy they produce goes straight to your electrical installation.

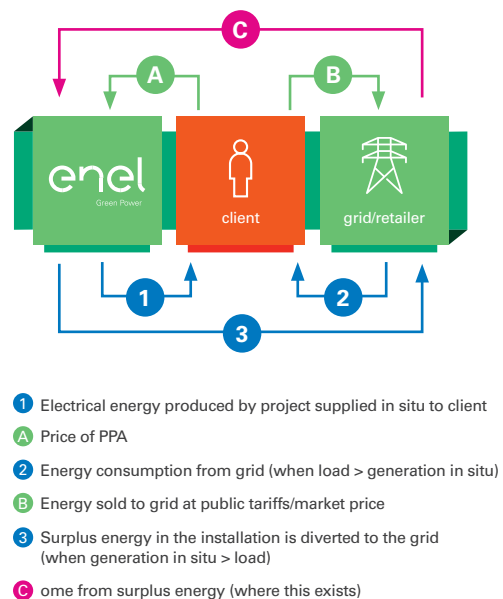
## Corporate BTM PPA with in situ or neighbourhood project

### + Principal features

- Generation and load in same location
- Visible and understandable
- Very low interconnection costs
- Potential reduction in demand loads
- Standard solutions
- Easy to integrate in supply portfolio

### ! Things to bear in mind

- You need the necessary space: roof or ground
- CAPEX may be high (without economies of scale)
- You need renewable resources available on the spot
- Supply is restricted to one location
- Construction permits are required
- A regulatory “net balance” is required to stimulate competition





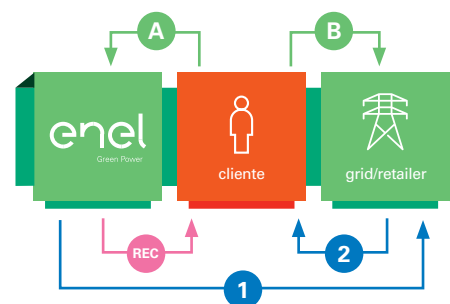


## Sleeved PPA or Physical Off-site PPA

**Under a Sleeved PPA (also known as a Physical Off-site PPA),** we identify the solutions best suited to your needs, **build the plant in a remote location, inject the energy into the grid** and supply you with the energy you need.

**It's a solution that gets round all kinds of logistics problems,** with plenty of opportunity for enhanced economies of scale.

**An agreement signed by Enel with public service companies, retailers or wholesalers**



- 1 100% of project energy is injected into the grid but assigned to client
- A Price of PPA
- 2 The client's consumption comes 100% from the grid
- B Only regulatory tariff/market price paid (2 - 1)
- REC Physical delivery (register) of certificates (as applicable)

### + Principal features

- Optimization of projects (economies of scale, more assets and maximization of resources)
- Possibility of participation in purchase of a project
- Potential supply to various locations
- Protection from volatility in market prices
- Potential cost savings

### ! Things to bear in mind

- You need the right regulatory framework (deregulated retail market/wheeling)
- The project must be located in the same grid as the load
- Generally speaking, there are no savings in grid tariffs (depending on the regulatory framework)
- Potential for sleeving/wheeling tariffs



## Financial PPA

Financial PPAs are also known as virtual PPAs (VPPA), contracts for difference (CFD) and synthetic PPAs.

Once we've identified the solutions best suited to your needs, **we'll build the plant in a remote location and inject the energy it produces into the grid.**

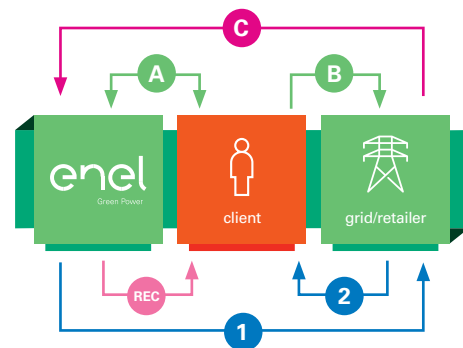
## Energy available to the market

### + Principal attractions

- No restraints on location/grid
- Possibility of participation in purchase of a project
- No limit to the number of supply points
- No sleeving/wheeling costs
- Protection from volatility in market prices
- Potential cost savings

### ! Things to bear in mind

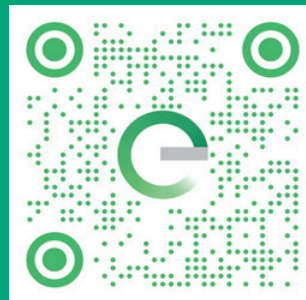
- Core risk assigned according to the selected benchmark price
- Potential impact on accounting requirements
- No savings in grid tariffs
- Modification to the existing supply contract held by the buyer to improve efficiency and coverage of PPA



- 1 100% of project energy is injected into the grid
- A Financial PPA (for difference vs. wholesale market price)
- C Wholesale price
- 2 The client's consumption comes 100% from the grid
- B Energy bought from grid at retail /market price
- REC Physical delivery of certificates (as applicable)







Follow us on



[enelgreenpower.com](https://enelgreenpower.com)