RENOVA ENERGIA


# Institutional Presentation

# About Renova

## *Shareholders´ Structure with solid Corporate Governance*

### Controlling Shareholders

| RR Participações | Light | Cemig | BNDES | Mantiq Investimentos | Others |
|---|---|---|---|---|---|
| 21.4% ON<br>0.0% PN<br>15.9% Total | 21.4% ON<br>0.0% PN<br>15.9% Total | 36.8% ON<br>0.0% PN<br>27.4% Total | 3.9% ON<br>22.8% PN<br>8.7% Total | 7.2% ON<br>41.9% PN<br>16.0% Total | 9.3% ON<br>35.3% PN<br>16.0% Total |

***Decisions unanumously***

## Board & Committees Composition

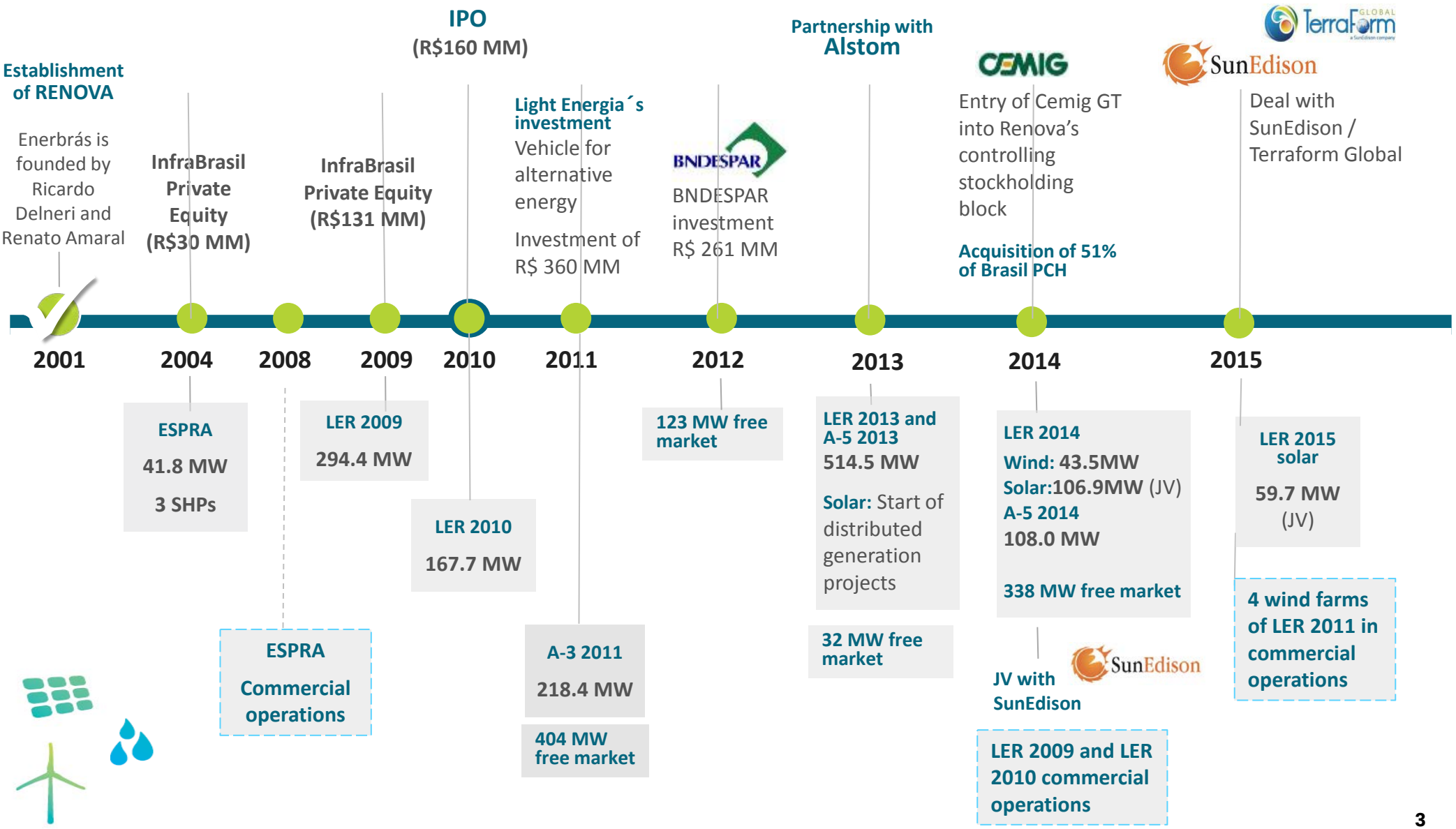
| | RR | Light | Cemig |
|---|---|---|---|
| **BOARD** [3] | **2** | **2** | **2** |
| Committees | | | |
| Management | 2 | 2 | 2 |
| Audit e *Compliance* | 2 | 2 | 2 |
| Finance | 2 | 2 | 2 |
| Talent & Compensation | 2 | 2 | 2 |
| Pipeline Development | 2 | 2 | 2 |
| Engineering & Operations | 2 | 2 | 2 |

## Unmatched Shareholders' Base


** The Board of Directors have a total of 9 members, of which 2 are independent.*

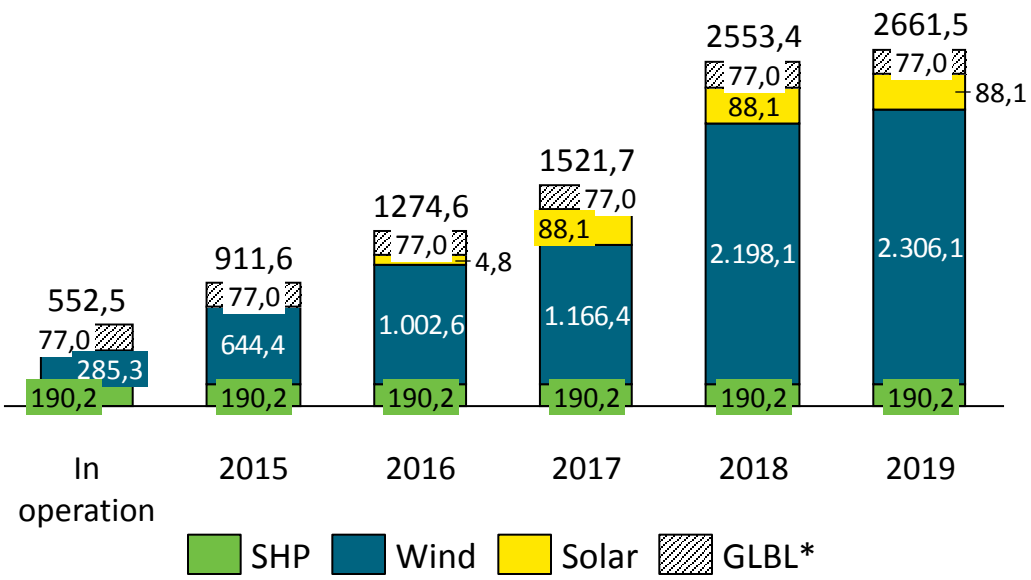
# Renova at-a-Glance

## Successful track record of project sourcing, structuring, implementation and operation of renewable energy projects

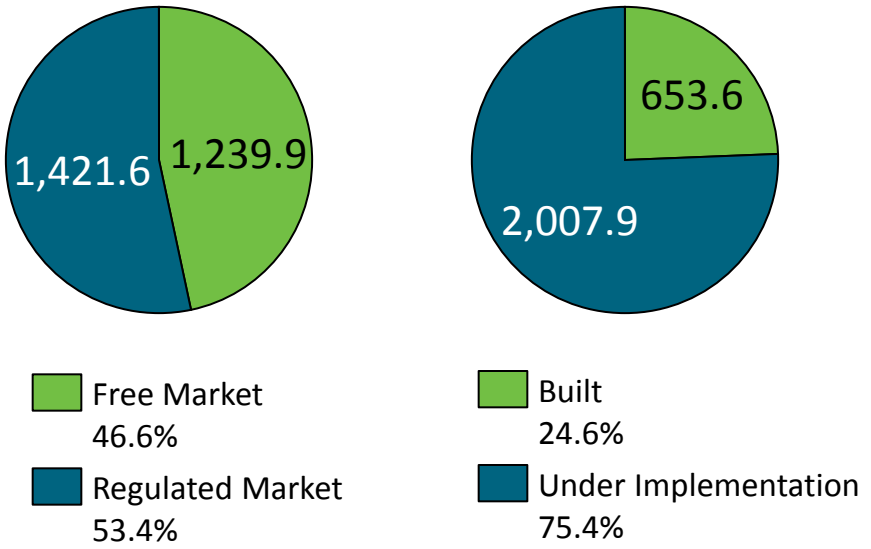


# Renova at-a-Glance

## Installed Capacity (MW)

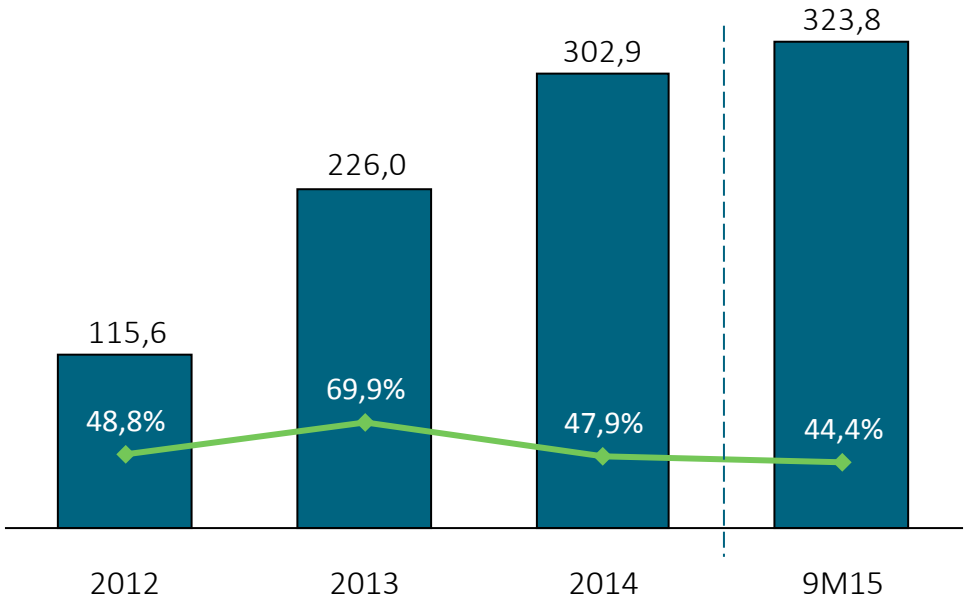



## Installed Capacity (MW) – Operational Status and Market

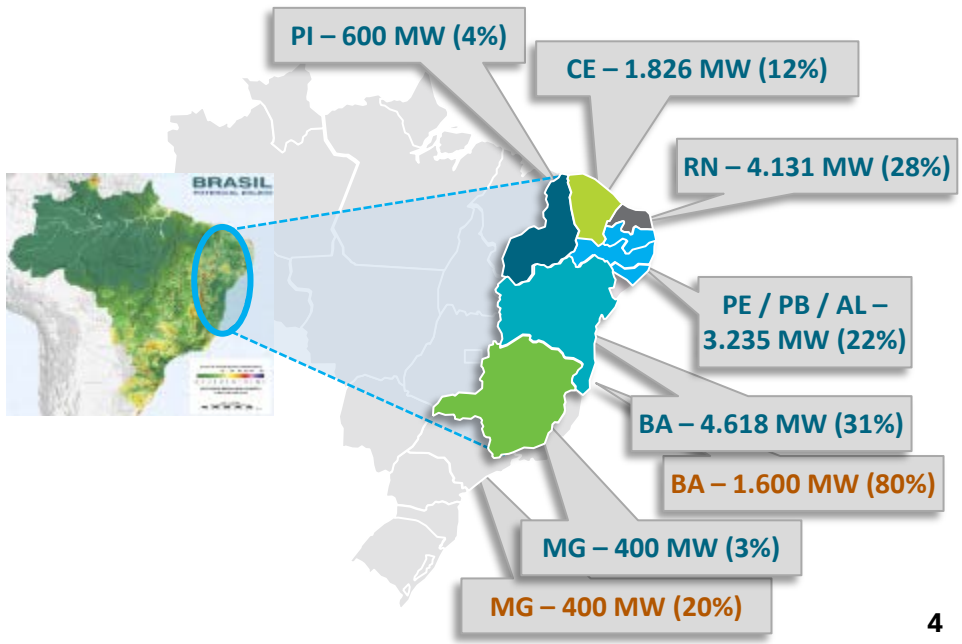



## Net Revenues and EBITDA Margin

(R$ MM)




## Additional pipeline of 16,8 GW (wind and solar)



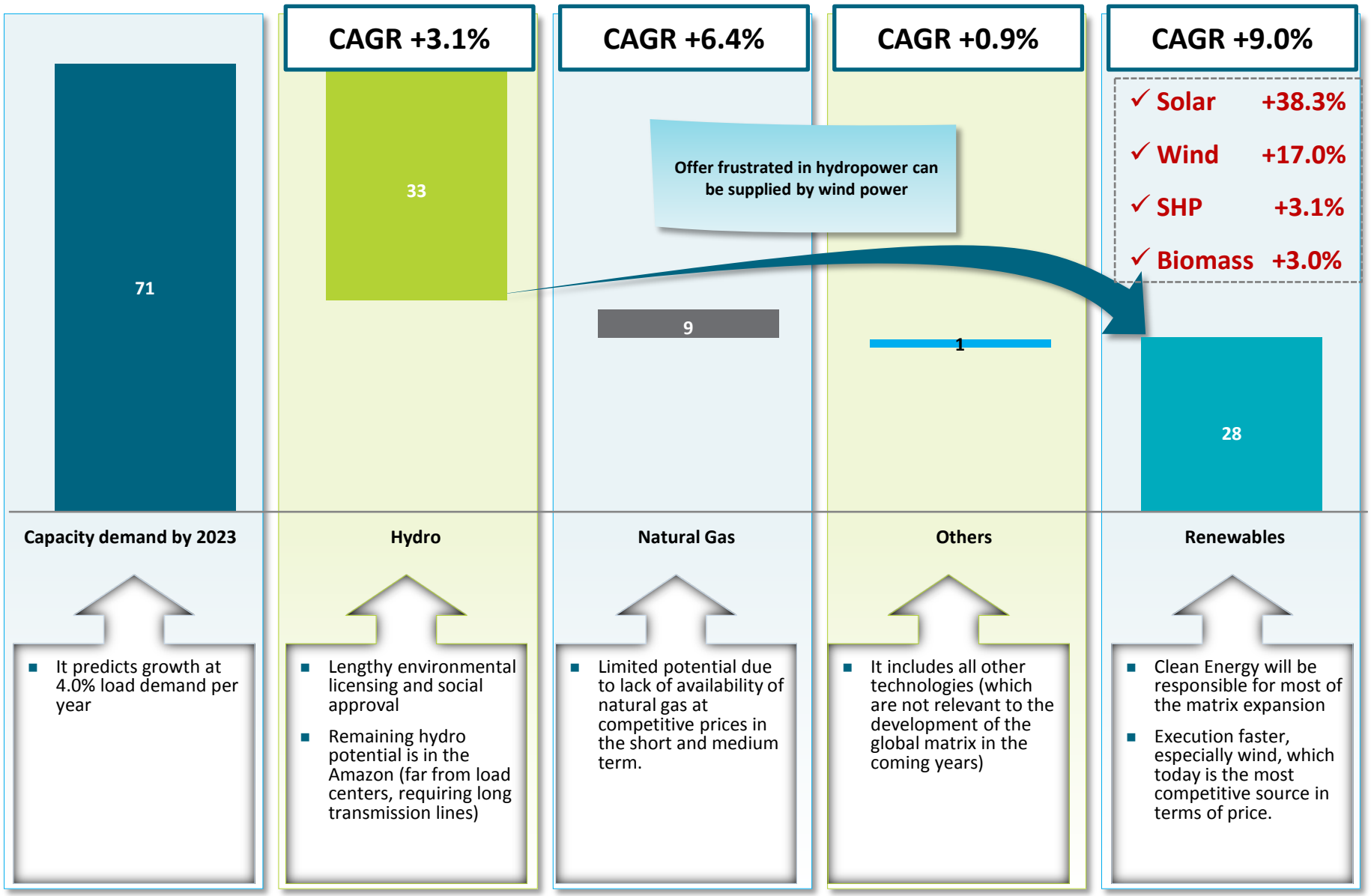
# Sector Overview

# Sector Overview

## *Strong Demand to be Covered by Renewables*

### New Energy demand in Brazil (GW)

***Assumptions → PIB do Brasil CAGR +3,8%.***




*Font: PDE 2023 e Aneel.*

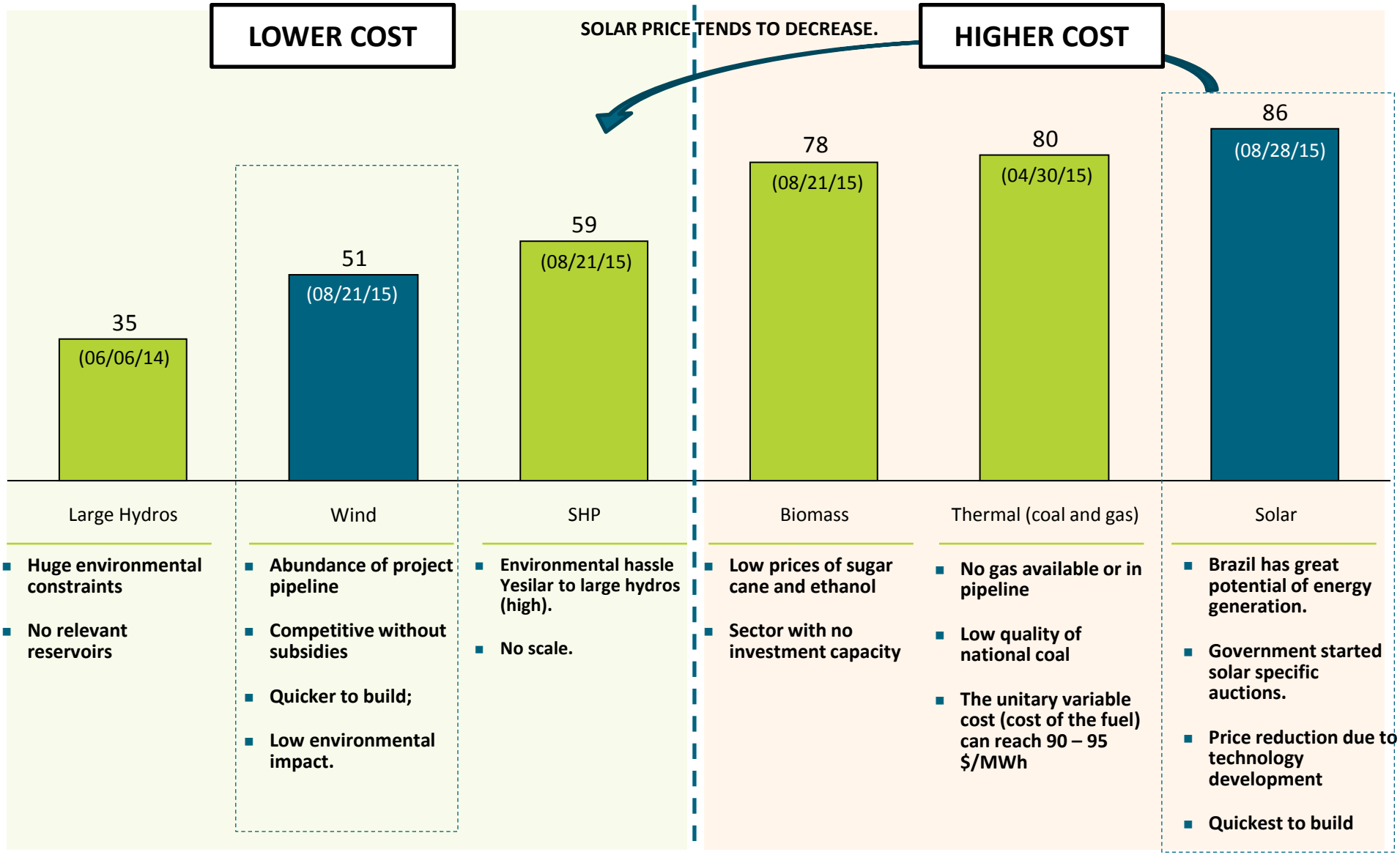
# Sector Overview

## *Competitiveness of energy sources in Brazil's market*

*Among renewable sources the highlights are wind and solar and both are focus of Renova's scope.*

### 2014 Action's Average Price

*USD / MWh* *Exchange Real-Dolar = R$ 3,50*



# Sector Overview

## *Wind Comparison Brazil vs. World*

### Maximize Capacity

**Goal**

The model with subsidy seeks to maximize energy generation (MW or MWh) to develop the market

### Minimize Cost

**Goal**

The current Brazilian model aims to minimize costs (R$/MWh) in a model oriented to competition

### European Wind Farms

- Oriented layouts to maximize capacity
- Turbines placed in good and average winds
- Lower average load factor

### Brazilian Wind Farms

- Turbines placed only in excellent winds
- Turbines in line side-by-side on hilltops
- Minimum Wake/treadmill effects
- Higher average load factors / Lower cost of energy

# Sector Overview

## *Wind Comparison Brazil vs. World*

*Large rotor for fast winds, because lack of turbulence and Wind gusts*

### WTG's Classes According to IEC 614000-1 (2005)

*(GW)*

**Avarage Speed (m/s)**
Determines energy production

| Renova | Class III | Class II | Class I |
|---|---|---|---|
| 9 | 7,5 | 8,5 | 10 |

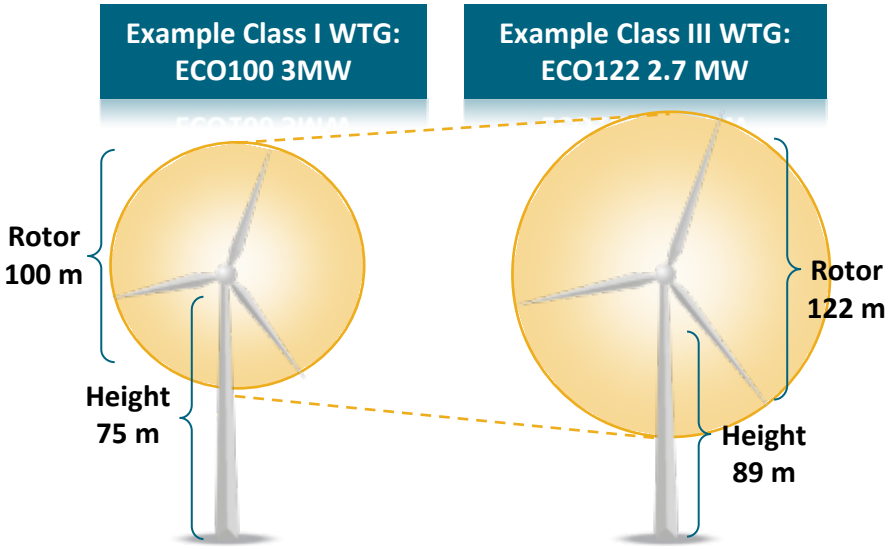
**Wind Gusts**
Determines turbine model, height and diameter of rotors

| Renova | Class III | Class II | Class I |
|---|---|---|---|
| >36,4 | 37,5 | 42,5 | 50 |

**Turbulence**
Determines turbine model, height and diameter of rotors

| Renova | Class III | Class II | Class I |
|---|---|---|---|
| <0,10 | 0,12 | 0,14 | 0,18 |

### Low Turbulence and Gusts: Larger Rotor




Energy = Air density * (Rotor Diameter)² * (Wind Speed)³

Energy is directly related to speed and rotor diameter

**Capacity factor by class of turbines**

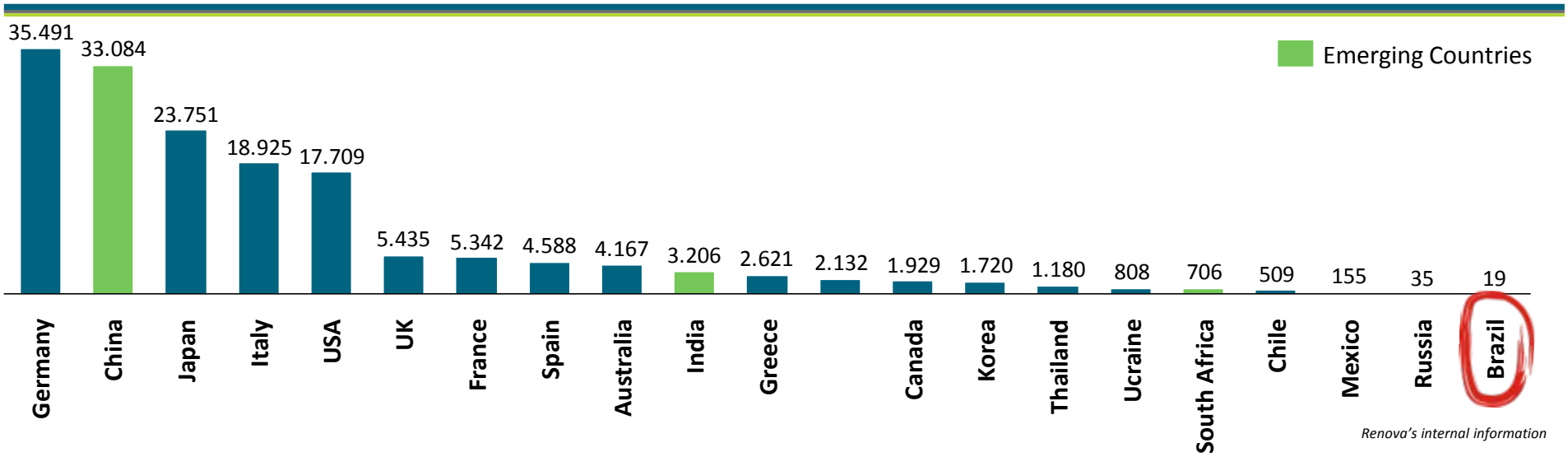
| Wind Speed | Class I | Class III |
|---|---|---|
| 9,4 m/s | 44% | 59% |

# Solar Market Overview

## *High potential to grow in Brazil*

*Despite having an abundant resource, Brazil has just begun developing its solar potential*

**Installed Capacity (MW)**

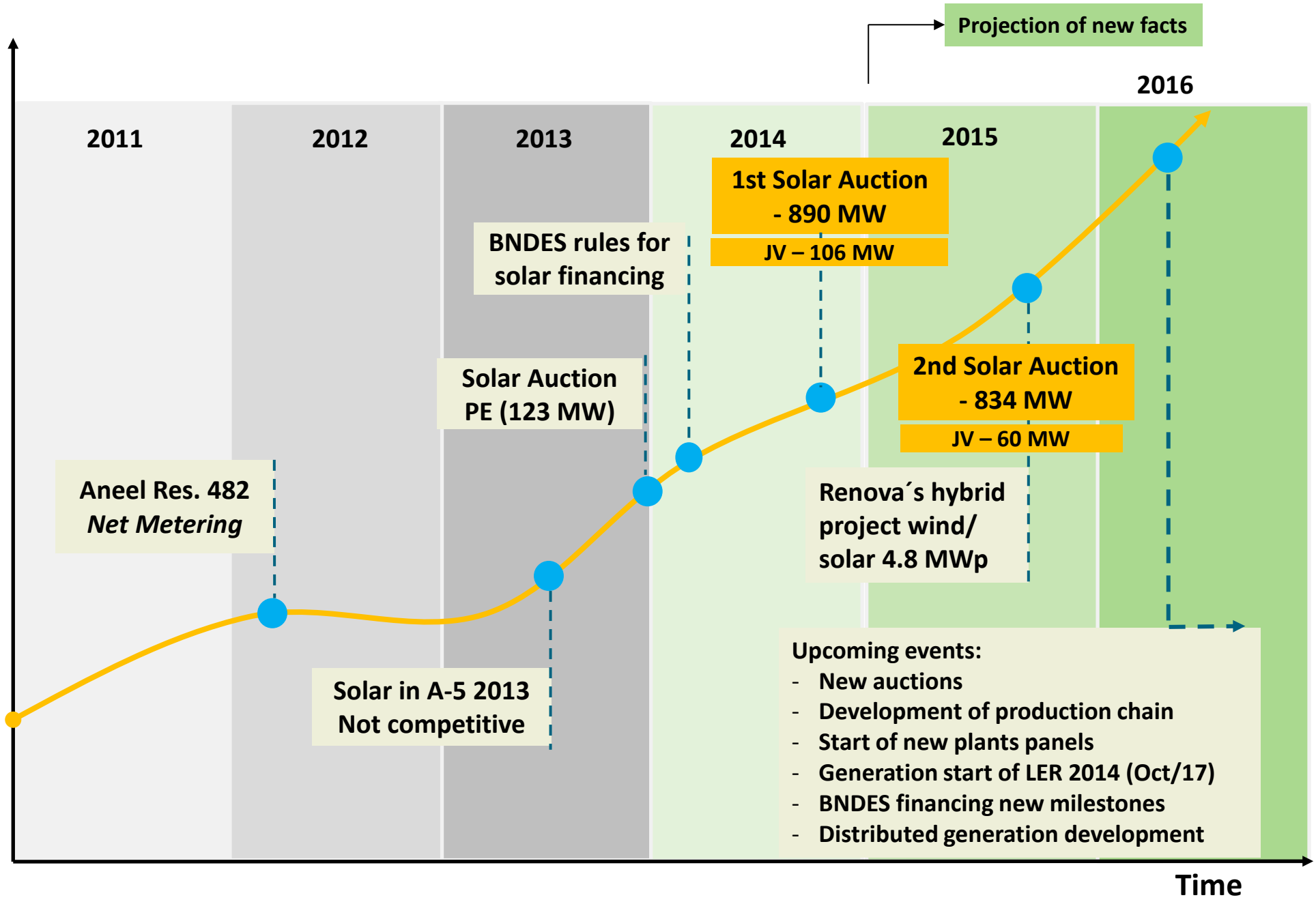



*Renova's internal information*

| | |
|---|---|
| ✓ Great solar potential across the country | Load factor of ~27% with trackers. |
| ✓ EPE 10 year plan of 2014 included solar for the first time | Plus 3,5 GWp forecast for the next 3 years. |
| ✓ First dedicated solar auction in 2014: 1 GW of installed capacity | Solar project auctioned in 2014 at same price as thermal, thus not expensive anymore. |
| ✓ Solar components factories are already being installed in Brazil. | First auction was the trigger for supply chain development → SunEdison, Ingeteam, among others. |
| ✓ Forecast for solar auctions to occur periodically | More than 10 GW registered at LER 2014, with good capacity factor. |

# Recent evolution of solar energy in Brazil

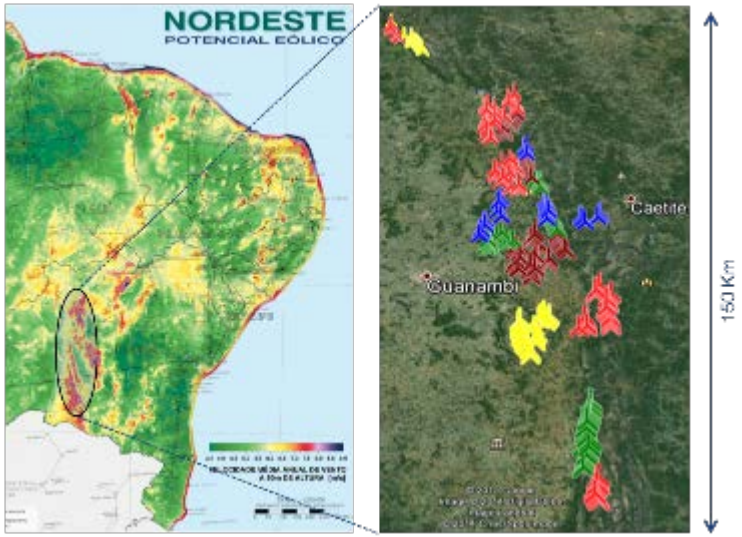
## Relevant events



# Competitive Advantages

# Competitive advantages: Renova is a full cycle developer by choice what allows the Company to built a huge wind and solar portfolio

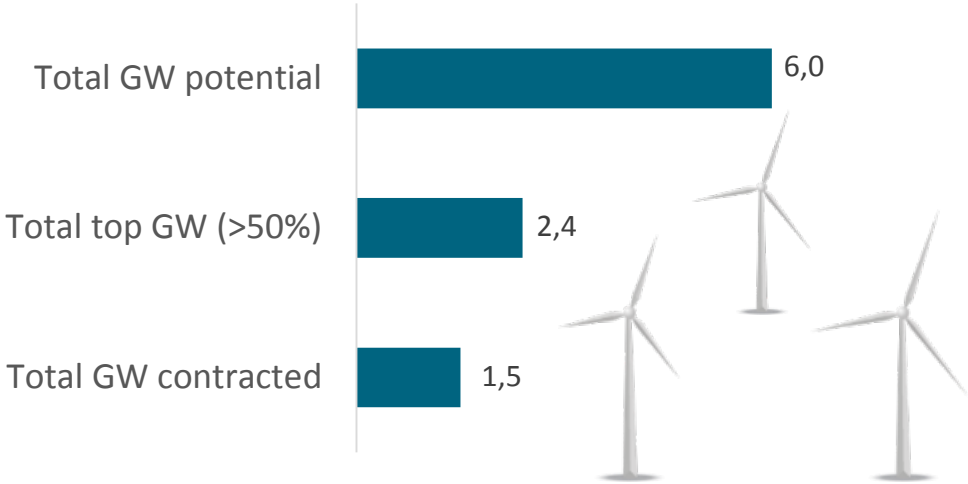
## The Gold Mine




**Unique site**

**Scale + Quality**

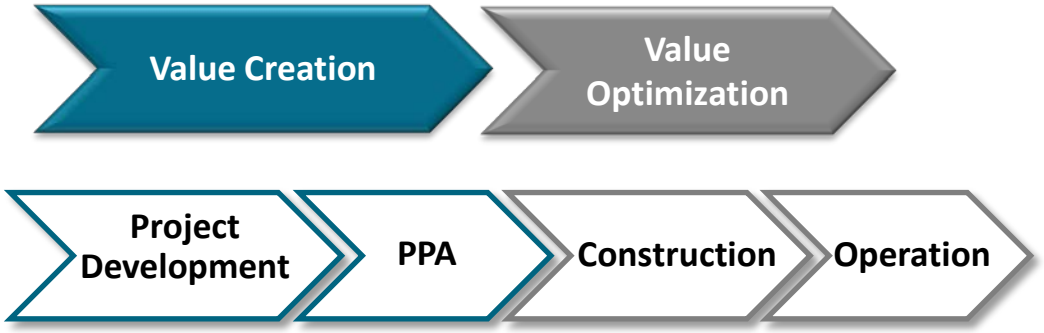
### Gold Mine GW Potential




## Total Assets Under Development: 17.4 GW

| Fonte | Capacidade | % do Total |
|---|---|---|
| Wind | 14,810 | 85% |
| SHP | 580 | 3% |
| Solar | 2,000 | 12% |
| **Total** | **17,390** | **100%** |

## Full Cycle Developer Maximizes Value Creation



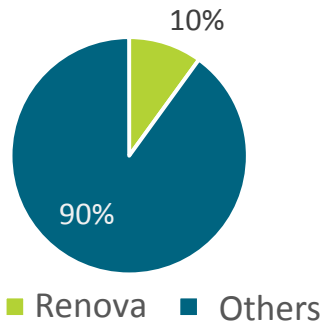
# Track record

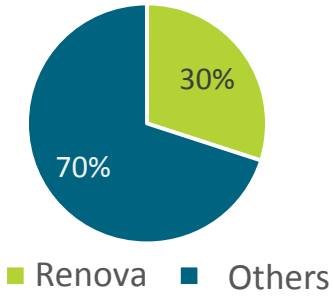
## Commercialization – Market Share

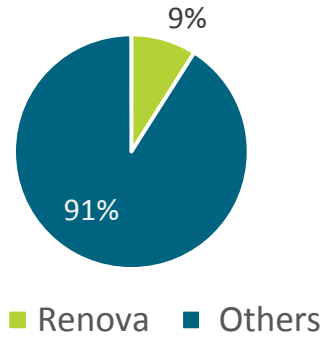
Renova is the leader company in contracted installed capacity in renewable sector in Brazil

And has consitently commercilized energy in both regulated and free Market, even in a huge and fragmented Market

| Wind – regulated market | Wind – free market | Solar – regulated market |
|---|---|---|




## Execution

Owners Engeneering

| ESPRA | Alto Sertão I | Alto Sertão II | Alto Sertão III |
|---|---|---|---|
| 3 SHPs | 14 Wind farms | 15 Wind farms | 45 Wind farms |
| 42 MW of installed capacity | 294 MW of installed capacity | 386 MW of installed capacity | 728 MW of installed capacity |
| COD - 2008 | COD – 2012[1]/2014 | COD – 2014/2015 | COD – 2015-2017 |
| ON TIME ON BUDGET | ON TIME ON BUDGET | ON TIME ON BUDGET | UNDER CONSTRUCTION |

[1] Ready to operate

# Strategic alliances´ track record in wind

## *Differentiated Long Term Alliance With Key Suppliers*

*Renova sempre perseguiu e conquistou as melhores parcerias com fornecedores para alcançar crescimento e escala*

### GE Energy

- ✓ Wind turbine supplier for the LER 2009, LER 2010 and LEN A-3 2011 projects
- ✓ 414 Wind turbine already constructed
- ✓ Special class of turbines
- ✓ Distribution center in loco
- ✓ Own crane (saves up to 2 weeks)
- ✓ Optimization of O&M costs

### ALSTOM

- ✓ Wind turbine supplier for other projects under construction / pipeline
- ✓ Frame Agreement: 550 turbines contracted - ~ 1.56 GW
- ✓ Best price guarantee
- ✓ Price fixed in R$
- ✓ Distribution center in loco
- ✓ Optimization of O&M costs
- ✓ Factories close to Renova´s projects
- ✓ Priority access to new technologies
- ✓ Co-development of technologies
- ✓ Specification of each turbine for every location

### SunEdison

- ✓ Joint Venture for investments in solar energy
- ✓ Target of ~1GW
- ✓ Price fixed in R$
- ✓ Financial structuring with FINAME (BNDES)
- ✓ SunEdison é líder mundial
- ✓ Experience in the implementation and operation
- ✓ Supplier of equipment for the first auction and JV has no obligation to contract equipment with SunEdison

# Experienced Management Team

Carlos Henrique Waack

CEO

Cristiano Corrêa de Barros

CFO, IRO and Commercialization

Ney Maron de Freitas

Environment Director

Ricardo de Lima Assaf

Institutional Relations And General Council

# Renova's transaction with TerraForm Global / SunEdison

# YIELDCO – Main Features

YieldCo is an instrument created in 2013 that offers investors a combination of yield and growth and offers to companies an attractive alternative for recycling capital at competitive costs

## What is a YieldCo?

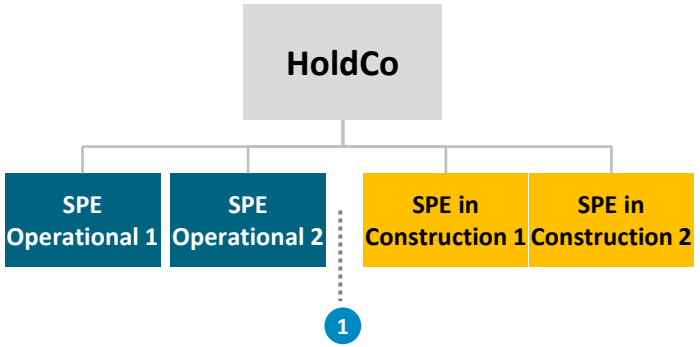
- The idea behind a YieldCo is to segregate the portfolio of operating assets into a new subsidiary and IPO this new company
- Objective: To hold and acquire operating assets with long-term contracts
- Defensive investment: dividend payment
- The development projects are kept in a separate company and can be acquired by YieldCo after COD
- Unlocking value for the parent company, with access to equity at a lower cost, given the lower risk profile of the already operating assets

### Requirements to structure a YieldCo

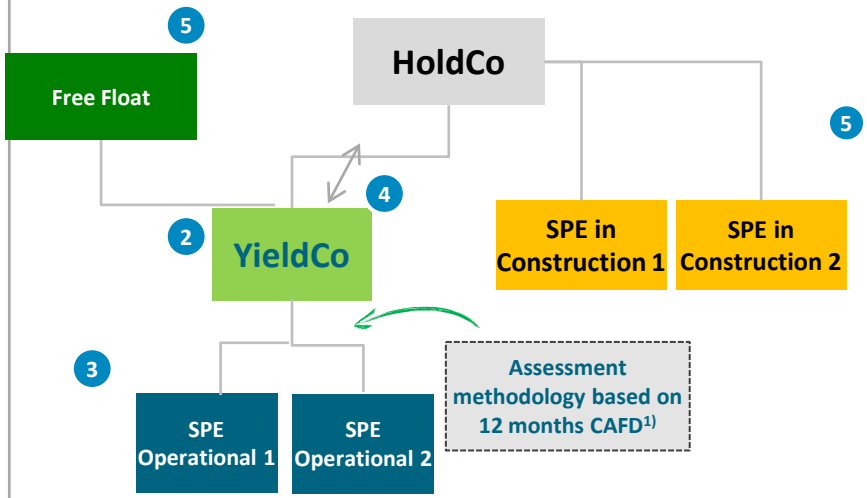
- Robust portfolio of operating assets and assets under development
- Long-term contracts with predictable cash flow and protected against inflation
- Growth opportunities in the Asset Base / Dividends (Access to Pipeline / "Rofo")
- Solid Regulatory / Legal Security

## Structure YieldCo

### Corporate Structure before YieldCo




### Corporate Structure after YieldCo




### Simplified step by step

1. Segregation of operating and non-operating assets
2. Creation of a new subsidiary called YieldCo
3. Transfer of the operating assets to the YieldCo
4. HoldCo and YieldCo sign agreement to YieldCo have preference for the acquisition of assets when they become operational
5. Shareholders of HoldCo monetize their participation in the YieldCo through IPO or sale to an already listed YieldCo

Note: (1) Evaluation of operational assets: CAFD (cash available for distribution) of next 12 months / yield

# Renova Transaction – Phase I

## Phase 1 – R$1.6 billion

| Assets | MW | Drop Down | EV (R$) | Net Debt (R$) | Equity Value (R$) |
|---|---|---|---|---|---|
| ESPRA | 42 | 2015 | 200 | 64 | 136 |
| Salvador | 195 | 2015 | 1,454 | 428 | 1,026 |
| Bahia | 99 | 2015 | 668 | 217 | 451 |
| **Total** | **336** | - | **2,322** | **709** | **1,613** |

LER 2009

The first phase of the agreement comprised signature of share purchase contracts for sale of wind and SHP operational assets, totaling 336.2 MW for R$1,613 millions:

- ✓ Share purchase agreement for sale of the assets of the Bahia project: 5 wind farms that placed supply in the LER 2009 auction, assessed at equity value of R$ 451 million, to be paid in cash;
- ✓ An agreement to exchange the shares of the Company's subsidiaries that hold assets of the Salvador project: 9 wind farms that placed supply in the LER 2009 auction, with equity value of R$ 1,026 million – for shares in TerraForm Global, on the basis of the price per share paid in the IPO (July 31, 2015).
- ✓ Completion of the disposal of the ESPRA projects to TerraForm Global is still subject to certain obligations, including regulatory approvals.

**R$587 milions in cash and R$1,026 billion for TerraForm Global shares**

11,4%

# Renova Transaction – Phase II

Phase II of the Agreement consisted of a contract in which shares in subsidiaries of Renova that hold assets with 2,204.2 MW of installed generation capacity were to be exchanged for shares in TerraForm Global, representing enterprise value of R$ 13.4 billion.

- One of the conditions precedent: conclusion of the sale to SunEdison of the stockholding interest in Renova held by Light, within the controlling stockholding block of Renova.

- **As a consequence of the sale of that interest not having been consummated, Phase II of the Agreement is canceled.**

Assets that were part of the transaction:

| Asset | Installed Capacity (MW) | Year of exchange |
|---|---|---|
| Light I | 200.7 | 2017 |
| Light II | 202.8 | 2017 |
| LEN A-5 2012 | 18.9 | 2017 |
| LER 2010 | 167.7 | 2018 |
| LEN A-3 2011 | 218.4 | 2018 |
| LER 2014 – wind | 43.5 | 2018 |
| LER 2014 - solar[1] | 53.5 | 2018 |
| LER 2013 | 159.0 | 2019 |
| Cemig[2] PPA | 676.2 | 2019 |
| LEN A-5 2013 | 355.5 | 2020 |
| LEN A-5 2014 | 108.0 | 2020 |

# About TerraForm Global

## IPO parameters

- ~1,400MW of installed capacity, primarily in solar and wind projects
- ~20 average years of contracted PPA
- CAFD next twelve months ~$ 215 MM
- Target dividend growth ~20% per year for the next three years

## TerraForm Global growth

- Sponsor's commitment to offer CAFD for the next few years
- Track-record of management in M&A and capital raising
- CAFD identified in third party´s call rights

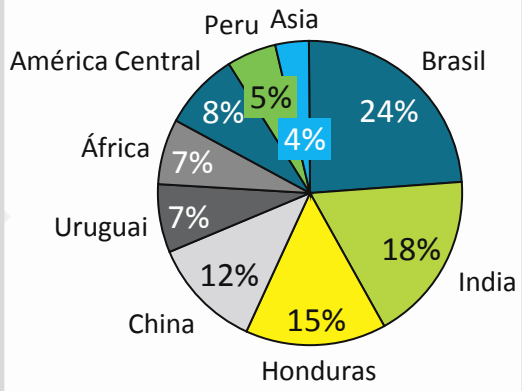
## SunEdison Support

- Largest listed company in the US to develop wind projects and solar
- Platform of development and operations
- Strong financial partners and expertise in capital markets
- Dedicated management and aligned globally

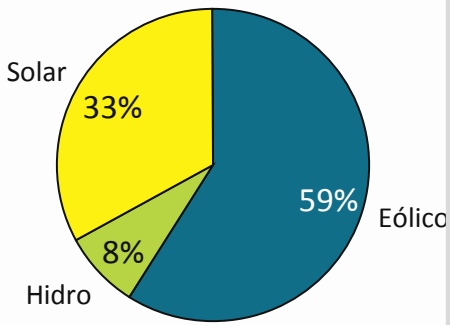
**IPO**

Growth pillars

**Geographic**




**Tecnology**




**Dropdowns Additional**

- *Dropdowns* of *sponsor*
- Third Party Acquisitions
- *Call rights* Third Party

# Contacts IR: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**tzago@renovaenergia.com.br**

**+ 55 11 3509 1174**


# Renova´s track record

## *High quality and diversified portfolio*

| Parks | Source | Complex | Installed Capacity (MW) | Energy Sold (avg MW) | Number of wind farms | Start of the contract |
|---|---|---|---|---|---|---|
| TerraForm Global[1] | Wind/Solar | | 77,0 | | | |
| LER 2010 | Wind | Alto Sertão II | 167,7 | 78,0 | 6 | Oct-14 |
| LEN A-3 2011 | Wind | Alto Sertão II | 218,4 | 103,6 | 9 | Mar/Sep-15 |
| LEN A-5 2012 | Wind | Alto Sertão III - Fase A | 18,9 | 10,2 | 1 | Jan-17 |
| LER 2013 | Wind | Alto Sertão III - Fase A | 159,0 | 73,7 | 9 | Sep-2015 |
| LEN A-5 2013 | Wind | Umburanas | 355,5 | 178,0 | 17 | May-18 |
| LEN A-5 2014 | Wind | Umburanas | 108,0 | 49,4 | 5 | Jan-19 |
| LER 2014 | Wind | Alto Sertão | 43,5 | 20,9 | 3 | Oct-17 |
| LER 2014[3] | Solar | Alto Sertão | 53,5 | 10,9 | 4 | Oct-17 |
| LER 20153 | Solar | Alto Sertão | 29,9 | 7,5 | 2 | Aug-17 |
| ESPRA | SHP | - | 41,8 | 18,7 | 3 | 2008 |
| Brasil PCH | SHP | - | 148,4 | 95,8 | 13 | 2008/2009 |
| **REGULATED MARKET** | **-** | **-** | **1.421,6** | **646,8** | **72** | **-** |
| Light I | Wind | Alto Sertão III - Fase A | 200,7 | 100,2 | 12 | Sep-15/Jan-16 |
| Light II | Wind | Alto Sertão III - Fase B | 202,8 | 100,2 | 12 | Sep-16 |
| Mercado Livre I | Wind | Alto Sertão III - Fase B | 21,6 | 11,0 | 2 | Jan-16 |
| Mercado Livre II | Wind | Alto Sertão III - Fase B | 101,4 | 50,0 | 8 | Jan-17 |
| Mercado Livre III | Wind | Alto Sertão III - Fase A | 32,4 | 15,0 | 2 | Sep-2015 |
| PPA Cemig | Wind | Jacobina | 676,2 | 354,0 | TBD | Sep-18 |
| Híbrido | Solar | Alto Sertão | 4,8 | 1,0 | 1 | 2016 |
| **FREE MARKET** | **-** | **-** | **1.239,9** | **631,4** | **37** | **-** |
| **TOTAL** | **-** | **-** | **2.661,5** | **1.278,2** | **109** | **-** |

1 – Considers 11.37% of Renova's stake in TerraForm Global based on its operational installed capacity on September 30, 2015