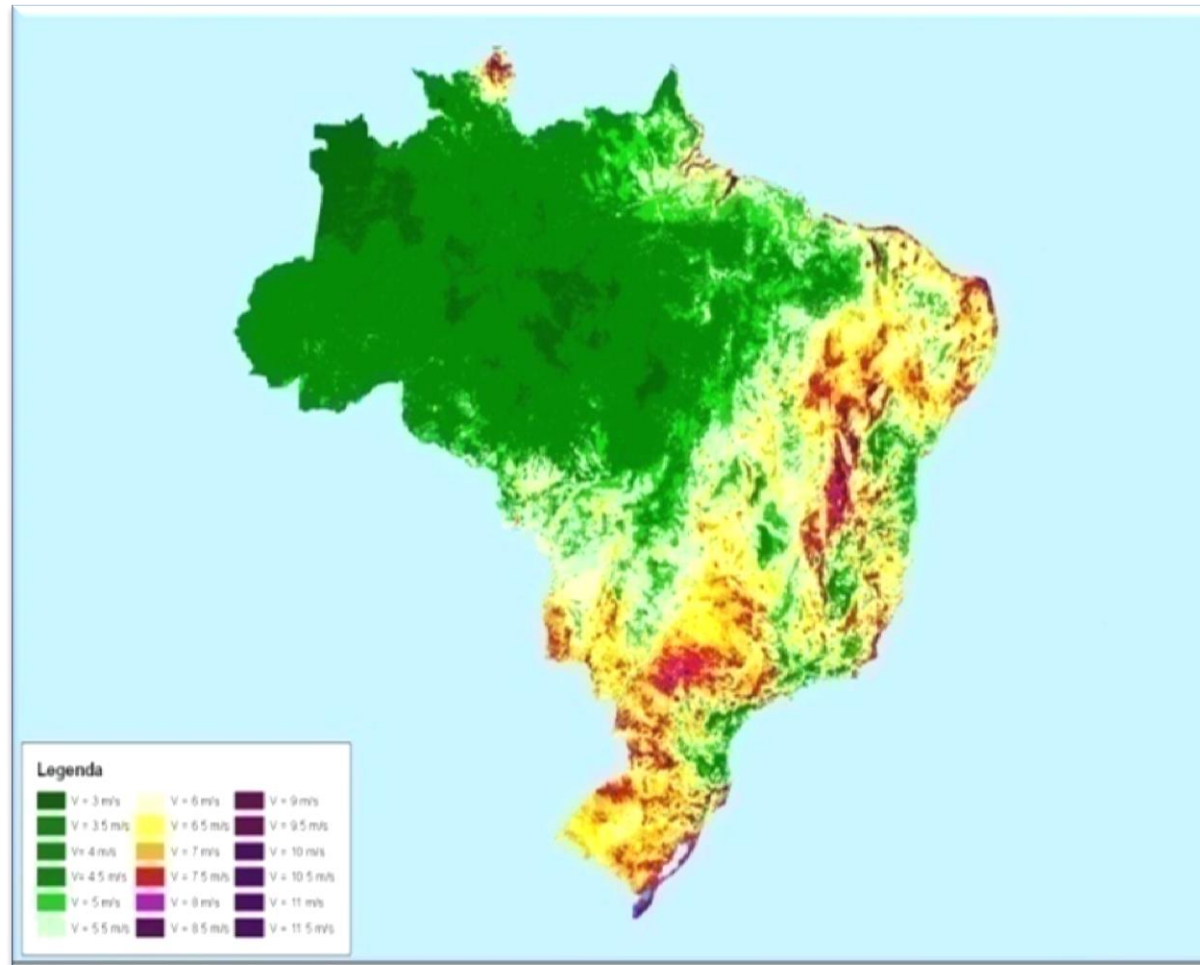


# **A Política Energética e a Convivência com a Seca**

J.C. de Miranda Farias  
Diretor Presidente

Brasília, 06 de agosto de 2015

# Potencial Eólico Brasileiro



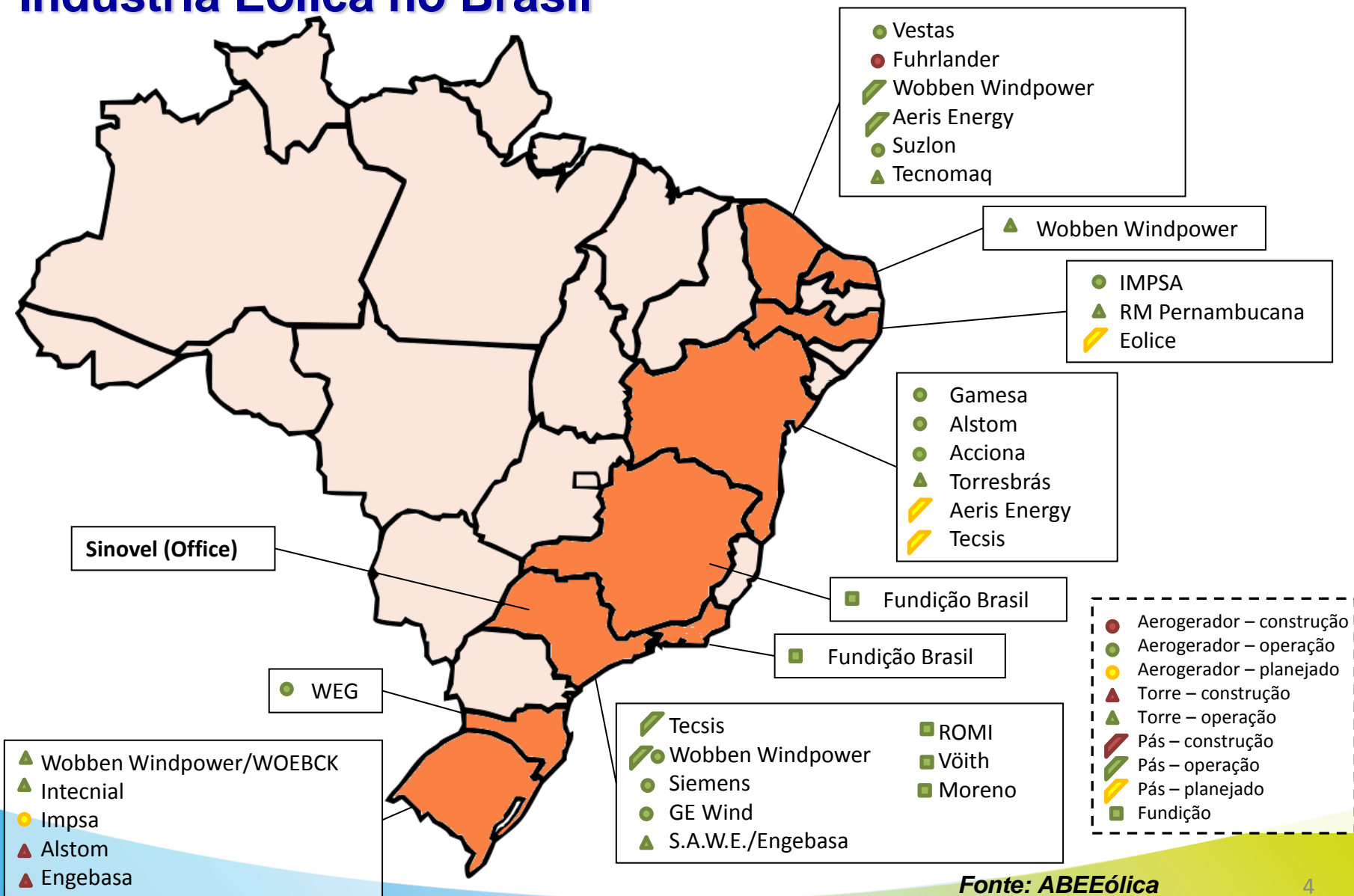
**> 300 GW**

*Fonte: Atlas do Potencial Eólico Brasileiro – Preliminar*

## **Projetos Eólicos Contratados em Leilões Início de operação até 2019**

Estado	Projetos	Pot (MW)
CE	77	1.839,3
RN	142	3.802,3
SE	1	30,0
BA	168	4.155,7
RS	85	1.810,9
PE	32	893,7
PI	44	1.206,6
MA	9	259,2
PB	3	90,0
Total	561	14.087,6

# Indústria Eólica no Brasil



Fonte: ABEEólica



# Energia Eólica – Impactos Sociais

27 AUGUST 2010  
www.rechargenews.com

Latin America wind 19



A future wind farm site provides a home and work for Maria Vilma Martins Batista's family

## How the rich coastal breezes could energise the poverty-stricken region

CHRISTIANA SCIAUDONE

Rio Grande do Norte is known for mango and coconut cultivation, fishing and shrimping. The shrimp industry, however, has been a ghost of what it once was since US demand dropped off severely, something locals blame on the global economic crisis.

The towns along the roads leading to Bioenergy's future wind farm sites are quiet enough that residents lounge at their doorsteps watching the cars that go by attentively.

The wind buzz has generated some jobs and lots of hope in this poverty-stricken region of the Northeast. Things have started looking up, and a recent study has found that poverty in the region has fallen from 34% to 20% since 1995.

Local resident Mario Sérgio da Silva Elias, a former shrimp-farm manager, has been hired as the manager of two Bioenergy wind farms.

He spends his days on the unpaved, rocky, red-dirt roads that lead to the two sites under his care. The facilities will be laid out on moving sand dunes, which is the case for many local wind developments.

Maria Vilma Martins Batista lives in the town of Pedra Grande, on land where one of the Bioenergy wind farms will be built, 100 metres from the ocean. Her husband works as a security guard at the site.

We had the moment of chicken, we had the moment of shrimp, now it's the moment of wind"

MARIO SÉRGIO DA SILVA ELIAS

Batista has never seen a wind turbine before, although the Rio do Fogo project is just an hour's drive away.

She is aware that the construction will not create permanent jobs, but she is hoping factories will follow with related services and commerce that would make

her town prosper. "I hope I'll be buried here," she says. But if the jobs do not come, they will have to move on.

The other wind farm under Elias' management is a couple of hours away in Caicara, a fishing village of about 1,000. Elias says the local families have few resources, and Bioenergy is committing itself to building infrastructure and providing work for them.

The Caicara wind farm will be built on leased land where an Italian entrepreneur built a single-storey hotel that he operated for about six months before closing it.

Elias seems pleased to see the wind industry booming.

"We had the moment of chicken, the moment of shrimp, and now it's the moment of wind," says Elias.

As with all trends, though, Elias is already anticipating a bust. He notes the massive investments the government is making in hydropower and the overcapacity it appears to be heading towards. "Until what point can Brazil sustain this energy growth?" he asks.

Bioenergy, a São Paulo-based company, is building 1623MW, which were sold at the December wind tender at an average rate of R\$152/MWh, and 200MW sold in a private deal with utility Centig for R\$145/MWh.

The group will invest in its own connections for all its wind farms, as it deems the government's substation and transmission plans too expensive. This investment will benefit any future wind farms it builds; and the company is planning to contract 300MW this year. By 2017, Bioenergy hopes to have 4GW of wind power installed.

No turbine maker has been chosen yet by Bioenergy, which is among the last companies from the L&QW tendered in 2009 still to close a deal.



Mario Sérgio da Silva Elias at a disused hotel site, where he will manage a wind farm

## Energia Eólica transforma sudoeste da Bahia

Charles Fernandes, prefeito de Guanambi, conta como foi a chegada da Renova: **"A partir de 2007, a economia da cidade tomou um novo rumo, com a proposta da energia eólica", explica. ...**

Mas para que a cidade pudesse aproveitar na totalidade os benefícios da cadeia industrial eólica, foi necessário que **a prefeitura investisse na realização de cursos profissionalizantes para qualificação de operários dos canteiros de obras, como pedreiros e tratoristas. ...**

Quem também iria se transformar em personagens da chegada da energia eólica no sudoeste baiano seriam **pessoas como Terezinha Costa, uma guanambiense de 45 anos que vivia da plantação de palma ou Leôncio Carvalho, que criava gado e plantava milho e feijão.**

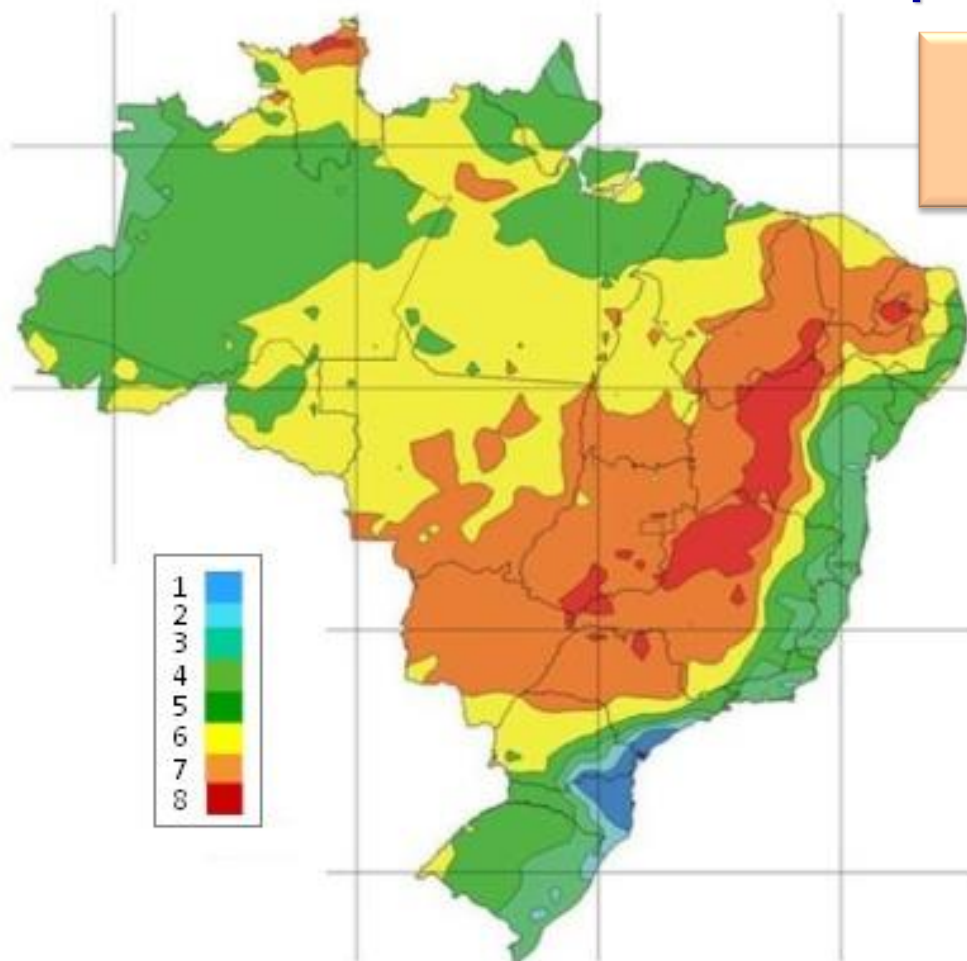
Dona Terezinha e seu Leôncio eram donos de terras sem valor econômico algum, mas que davam acesso a área de **lay-down** dos parques, que é aonde se implantam as torres. **Com o arrendamento dessas terras, os proprietários recebem em torno de R\$ 5.500 por ano por aerogerador que fica nos seus terrenos. O pagamento é feito mensalmente, por meio de depósito bancário, feito desde janeiro de 2011, início das obras.**

Pedro Aurélio Teixeira, da Agência CanalEnergia, de Guanambi (BA) 20/04/2012



# Energia Solar

## Mapa Brasileiro de Irradiação Global



**Brasil**  
**Irradiação diária média anual**  
**1.500 e 2.400 kWh/m<sup>2</sup>/ano,**

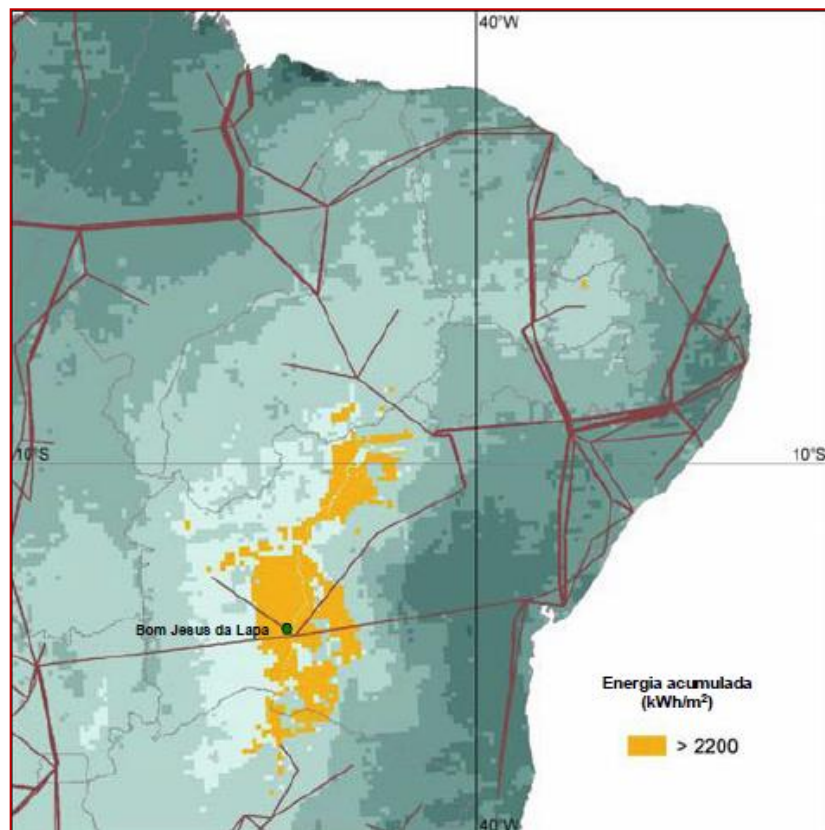
**Alemanha: 900-1.250 kWh/m<sup>2</sup>/ano**

**França: 900-1.650 kWh/m<sup>2</sup>/ano**

**Espanha: 1.200-1.850 kWh/m<sup>2</sup>/ano**

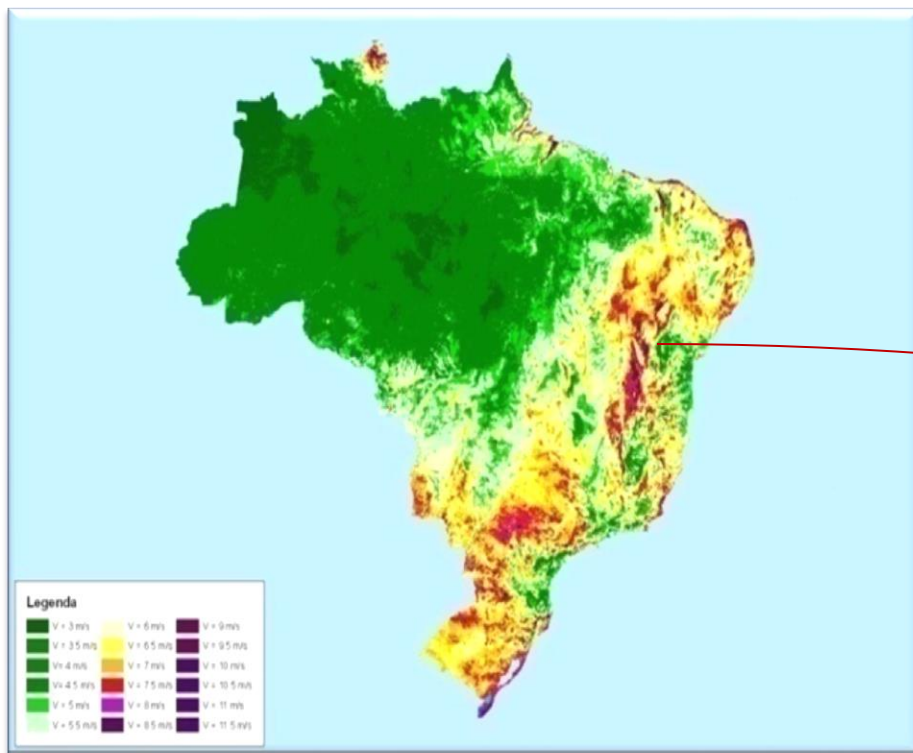


# Irradiação Direta



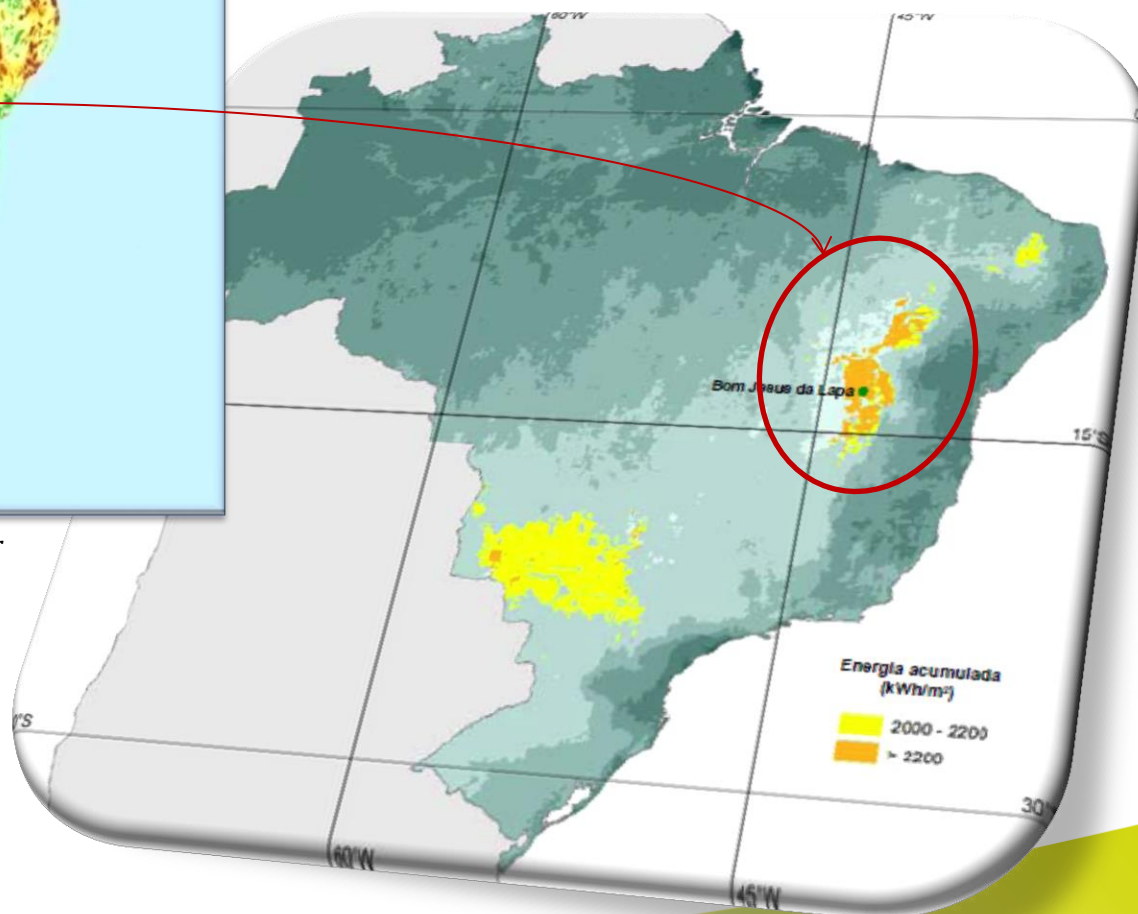
Fonte: Pereira e Lima (2008)





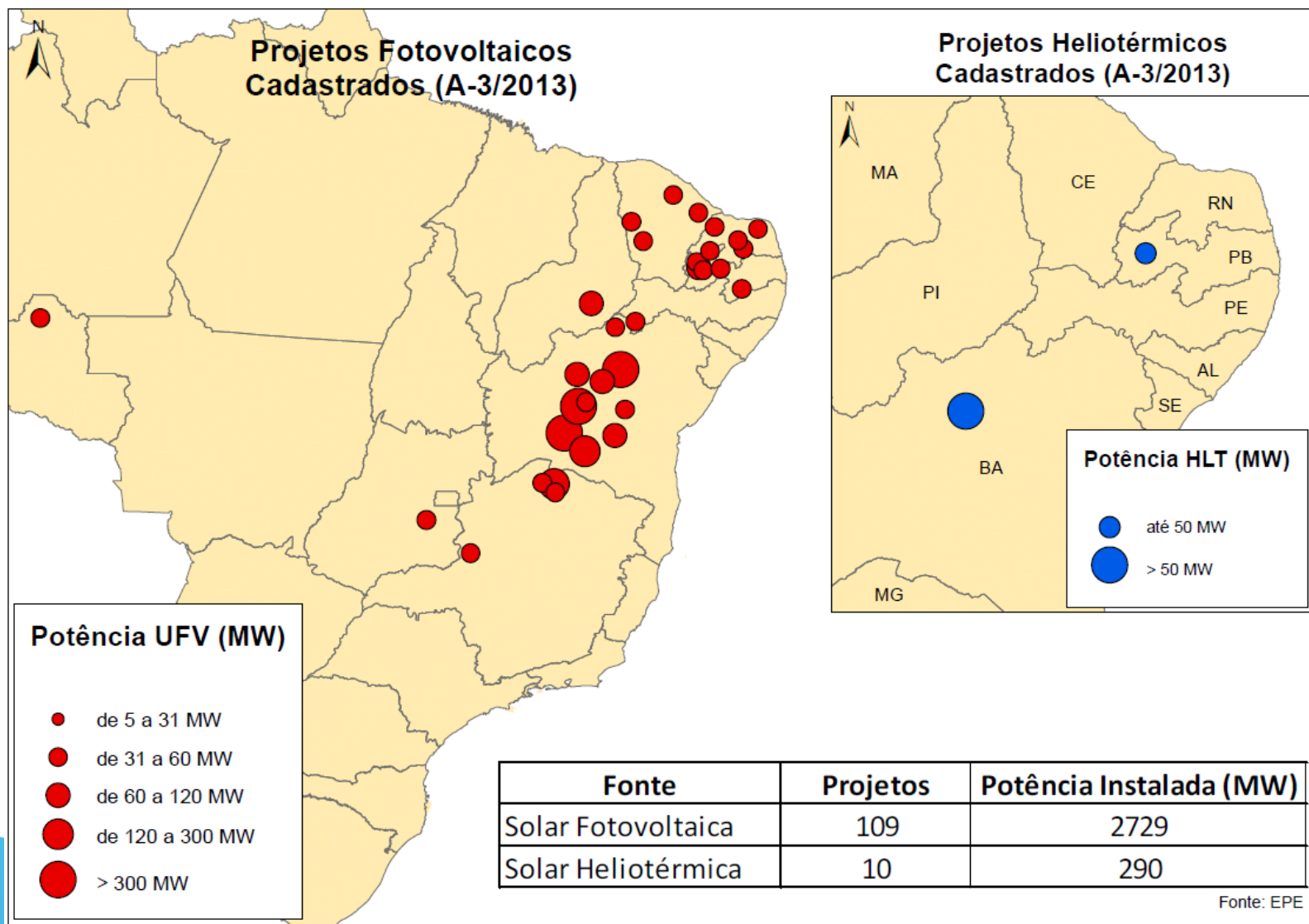
Fonte: Atlas do Potencial Eólico Brasileiro – Preliminar

Fonte: Pereira e Lima (2008)





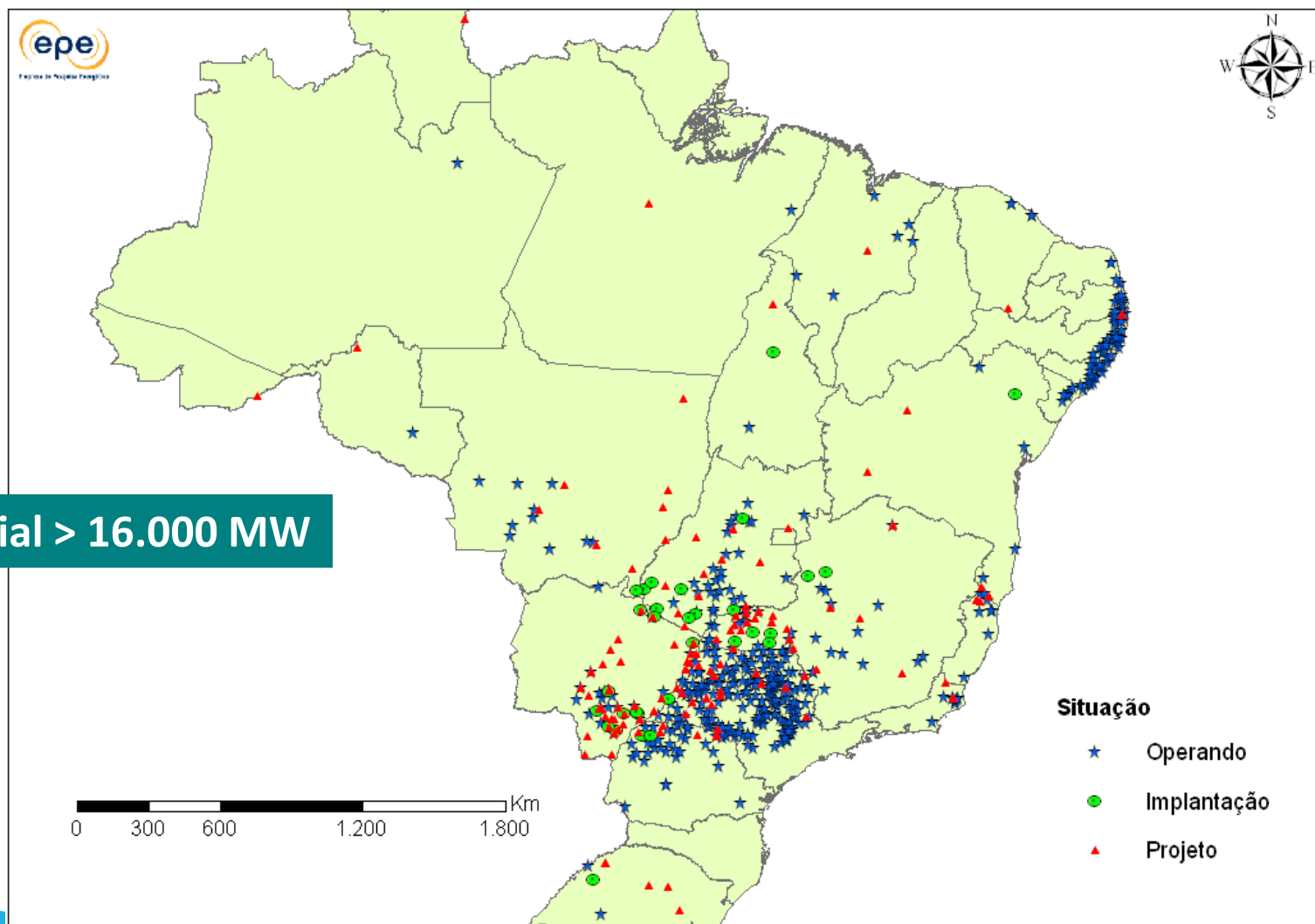
## Cadastramento A-3/2013



## Projetos fotovoltaicos cadastrados no LER/2014

Estados	Projetos	Oferta (MW)
Bahia	161	4.334
Piauí	45	1.231
Pernambuco	43	1.152
Rio Grande do Norte	42	1.155
São Paulo	26	788
Paraíba	25	653
Tocantins	21	590
Minas Gerais	17	507
Ceará	15	324
Goiás	4	35
Mato Grosso do Sul	1	20
Total	400	10.790

## Plantas Produtoras de Etanol





***Fim***

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