# The RESILIENCE Climate Service

## Predicting Renewable Power over Future Monthly to Decadal Timescales

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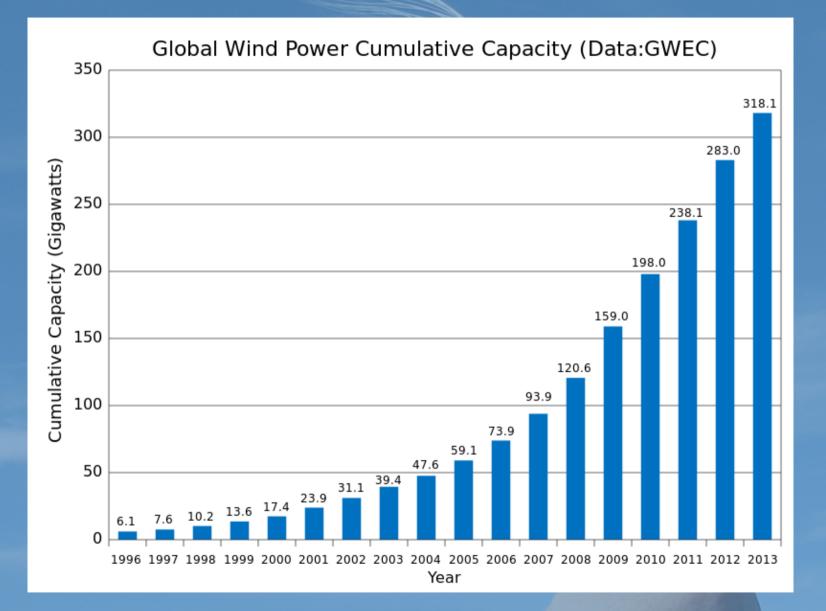
## "The development of any business requires the ability to predict market movements over which it operates."

Ignacio Lainez Aracama, Professor of Wind Energy, EOI and Director of Energy Assessments, EDP Renewables. El País Article: 4th March 2014: Mix energético: las renovables y su predictibilidad





#### Worldwide installed capacity of wind power







#### **RESILIENCE** Improve predictability of wind power generation





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SERVICE: Climate predictions from 1 month to 1 year, for wind speed, wind power and temperature

**RESILIENCE** Climate Service

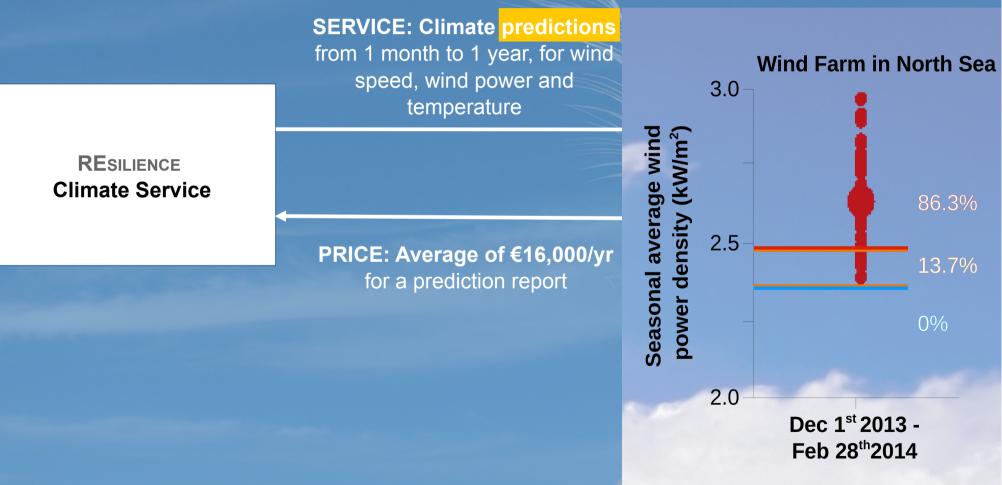
PRICE: Average of €16,000/yr for a prediction report

Wind Farm Operator, Owner or Investor





#### **RESILIENCE** Improve predictability of wind power generation







#### **RESILIENCE BENEFITS**

Significant cost savings by anticipating market changes:

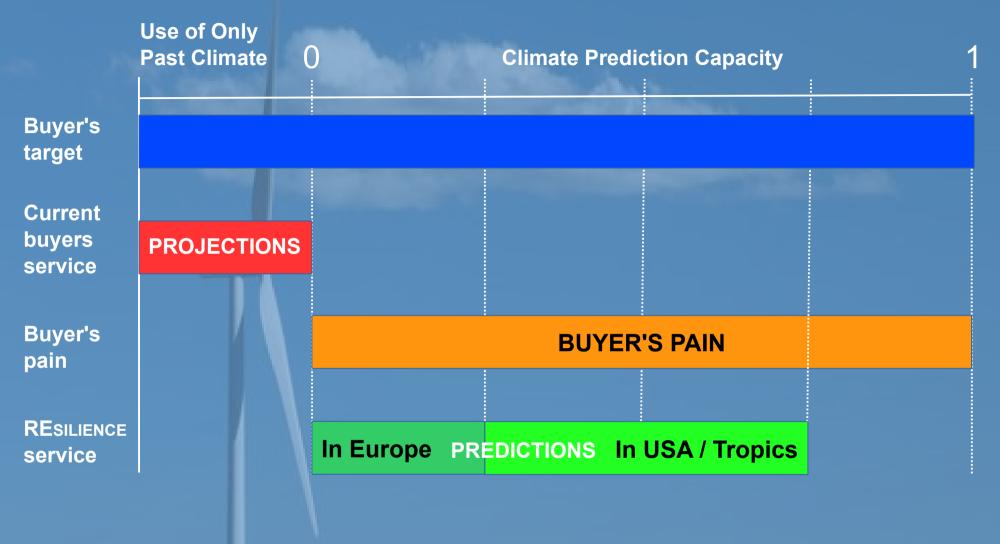
- identifies vulnerabilities and risks

- facilitates strategic climate adaptation action





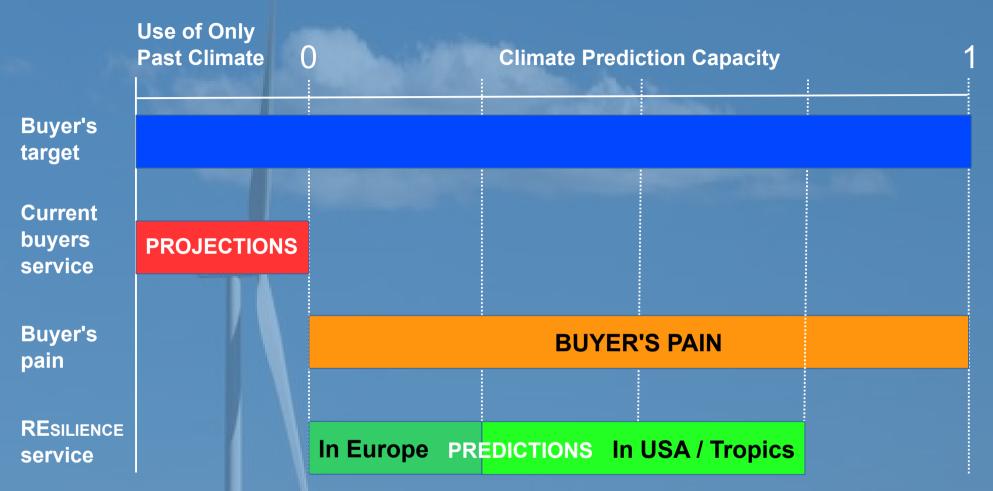
#### **INDEX: WIND POWER ESTIMATION**







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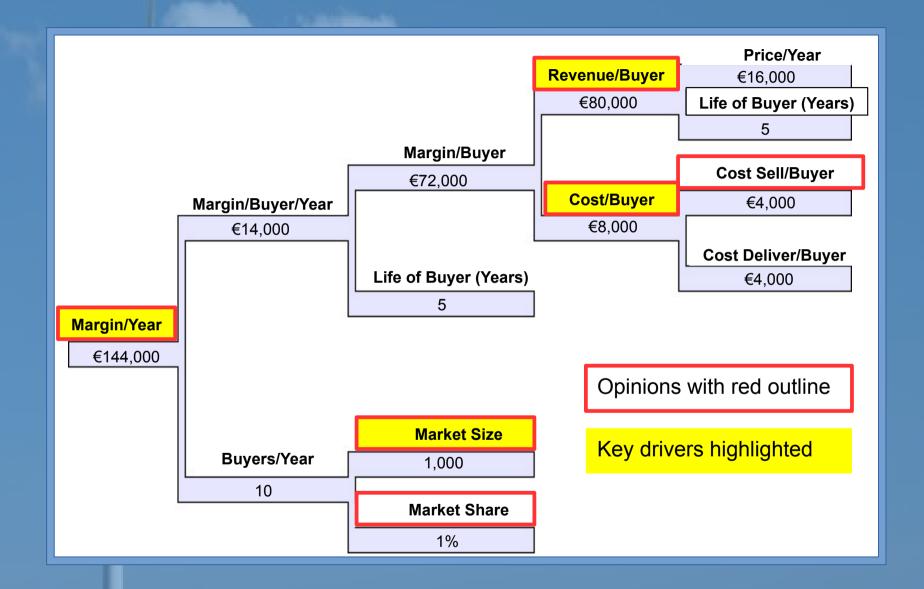


#### The First Markets: Central US, Brazil and Asia





#### **RESILIENCE FINANCIALS: Year 1**







## FOUNDER'S DREAM

100% global renewable energy generation.





## "[Renewable] energy provision may be anticipated, not only in the short and long term as it is today, but also at intermediate horizons, where a huge market niche appears."

Ignacio Lainez Aracama, Professor of Wind Energy, EOI and Director of Energy Assessments, EDP Renewables. El País Article: 4th March 2014: Mix energético: las renovables y su predictibilidad







Global RE power: 12,500 MW



2013 Profits: \$4,822 mil.

Global RE power: 8,900 MW



Global RE power: 5,000 MW



Global RE power: 535 MW



2013 Profits: \$174 mil. Global RE power: 2,310 MW



