

Regional REC and RPS Best Practices

Jennifer Alvarado, Exec. Dir.

**Great Lakes Renewable Energy
Association**

www.glrea.org



GLREA

GREAT LAKES RENEWABLE ENERGY ASSOCIATION

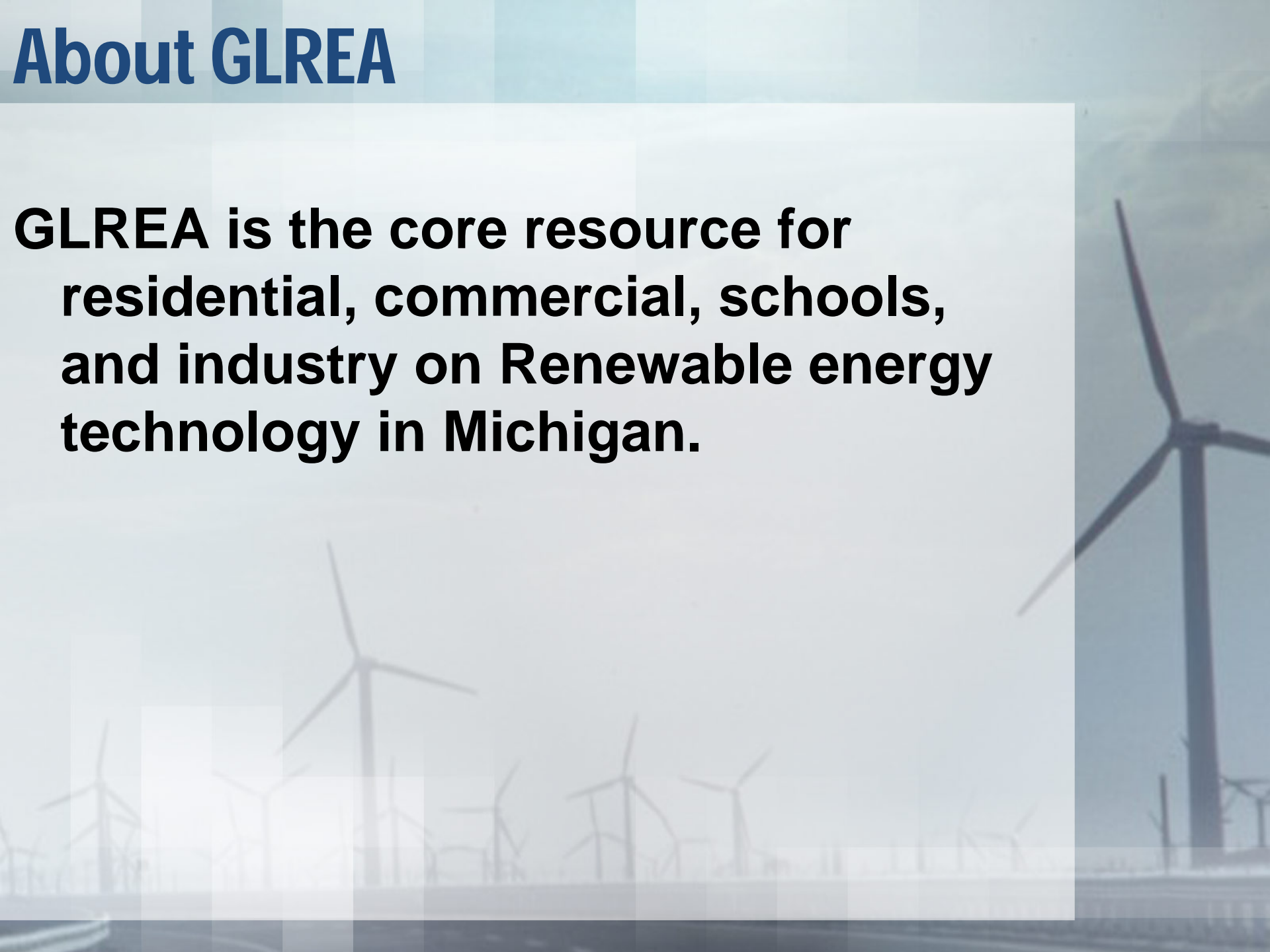
About GLREA

- **Founded in 1991 to promote, educate and increase the use of renewable and sustainable energy practice.**
- **GLREA's growing membership of almost 2,500 members include: corporations, small businesses, municipalities, colleges and residents.**



About GLREA

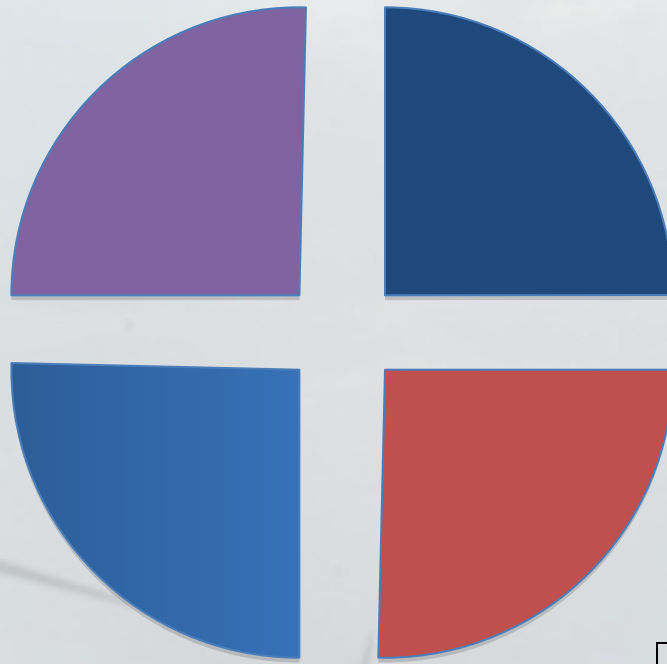
GLREA is the core resource for residential, commercial, schools, and industry on Renewable energy technology in Michigan.



GLREA's Strategic Focus

**Energy
Efficiency**

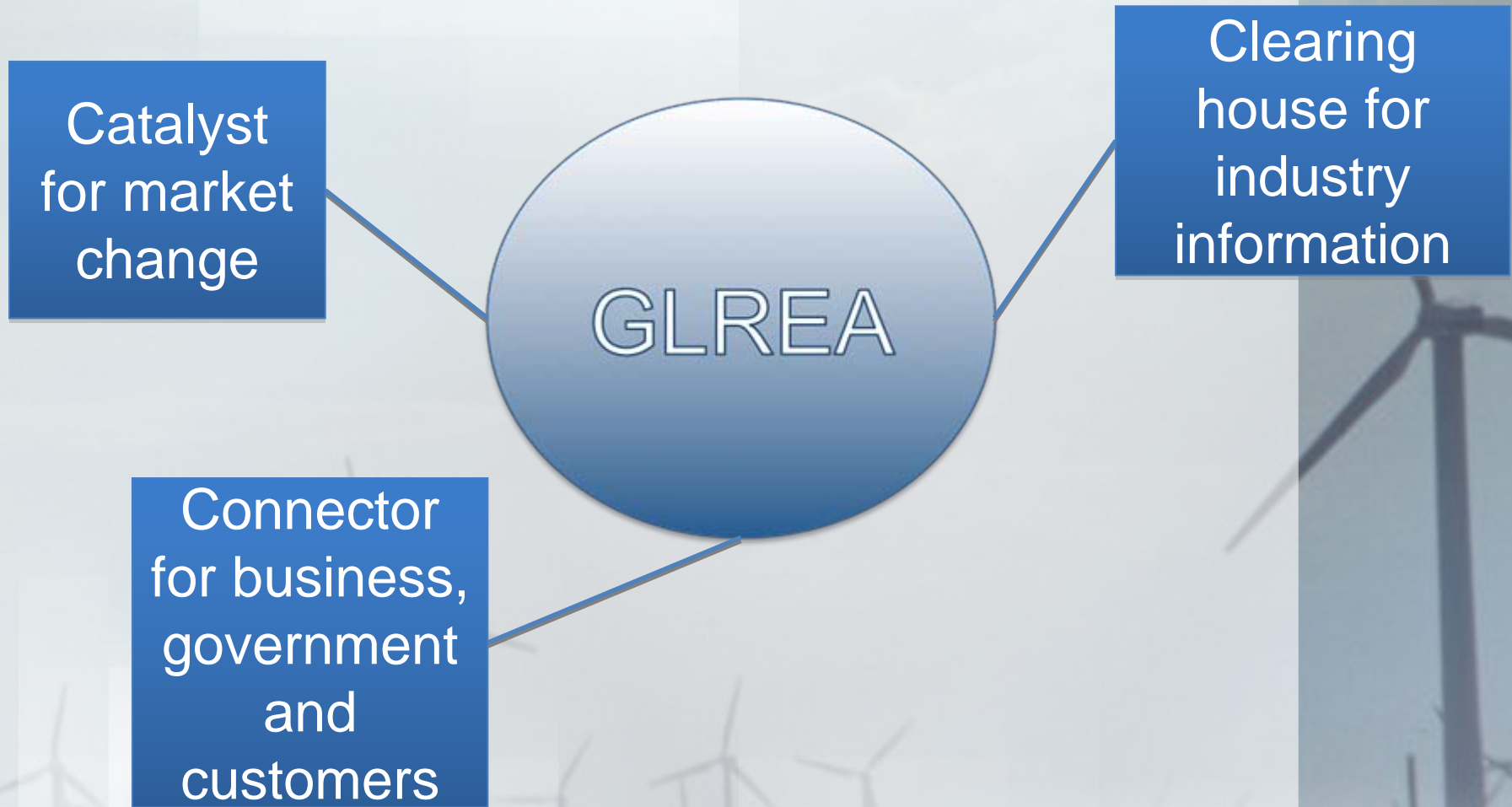
**Small Scale
Renewables**



**Large Scale
Wind Energy**

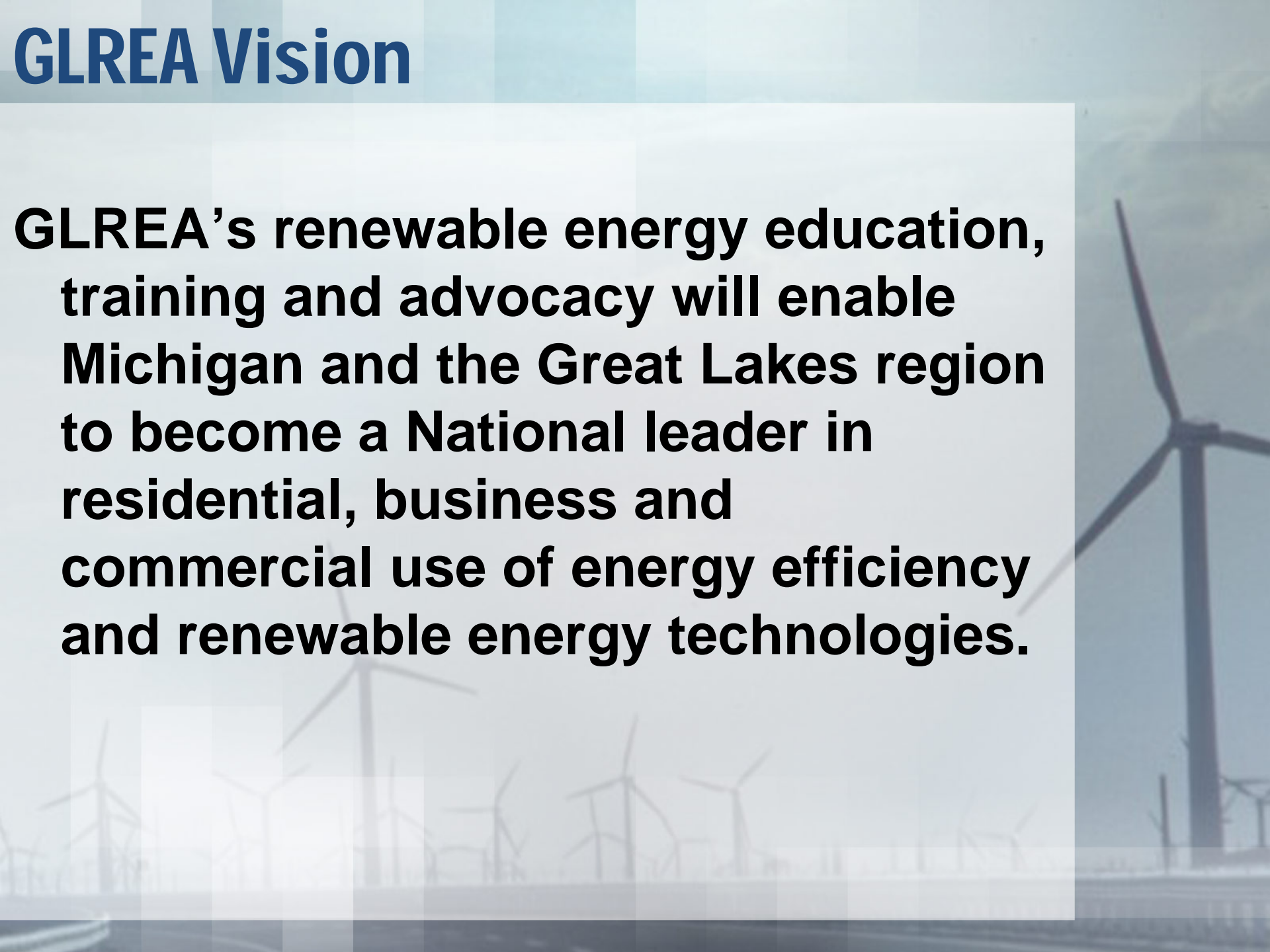
**Sustainable
Energy Policy**

GLREA Position in Michigan



GLREA Vision

GLREA's renewable energy education, training and advocacy will enable Michigan and the Great Lakes region to become a National leader in residential, business and commercial use of energy efficiency and renewable energy technologies.

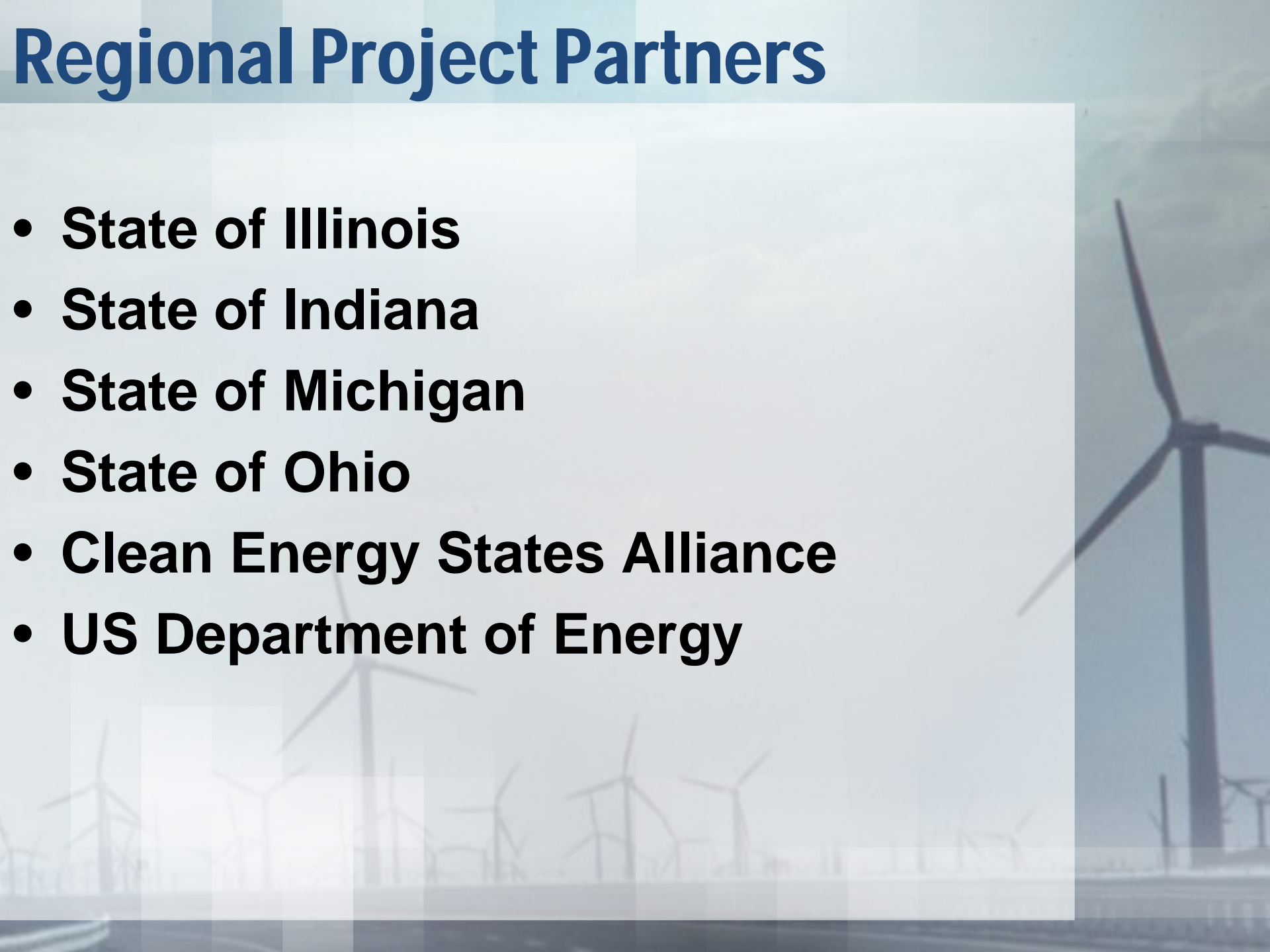


The background of the slide is a photograph of a wind farm. Several wind turbines are visible, with one in the foreground on the right side being more prominent than the others. The sky is a pale, overcast blue. A large, semi-transparent white rectangular box is centered on the slide, containing the title text.

**Regional REC
and
RPS Best Practices
Project**

Regional Project Partners

- **State of Illinois**
- **State of Indiana**
- **State of Michigan**
- **State of Ohio**
- **Clean Energy States Alliance**
- **US Department of Energy**



Project Goals



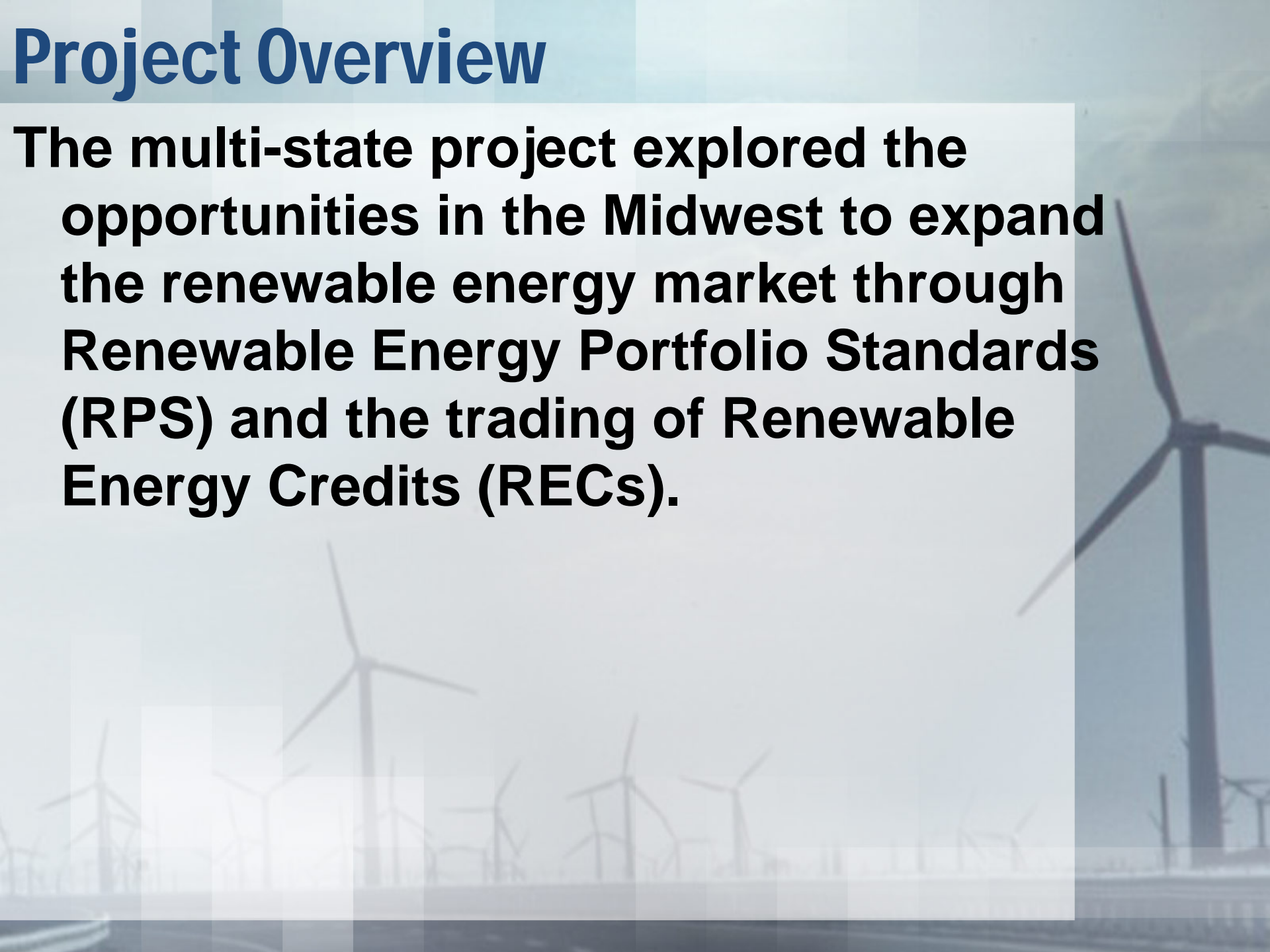
GLREA engaged in this project to:

A) To facilitate and support Midwest states as they address and work through an RPS and REC compliance.

B) To lay regional ground work for possible Federal RPS/REC programs.

Project Overview

The multi-state project explored the opportunities in the Midwest to expand the renewable energy market through Renewable Energy Portfolio Standards (RPS) and the trading of Renewable Energy Credits (RECs).

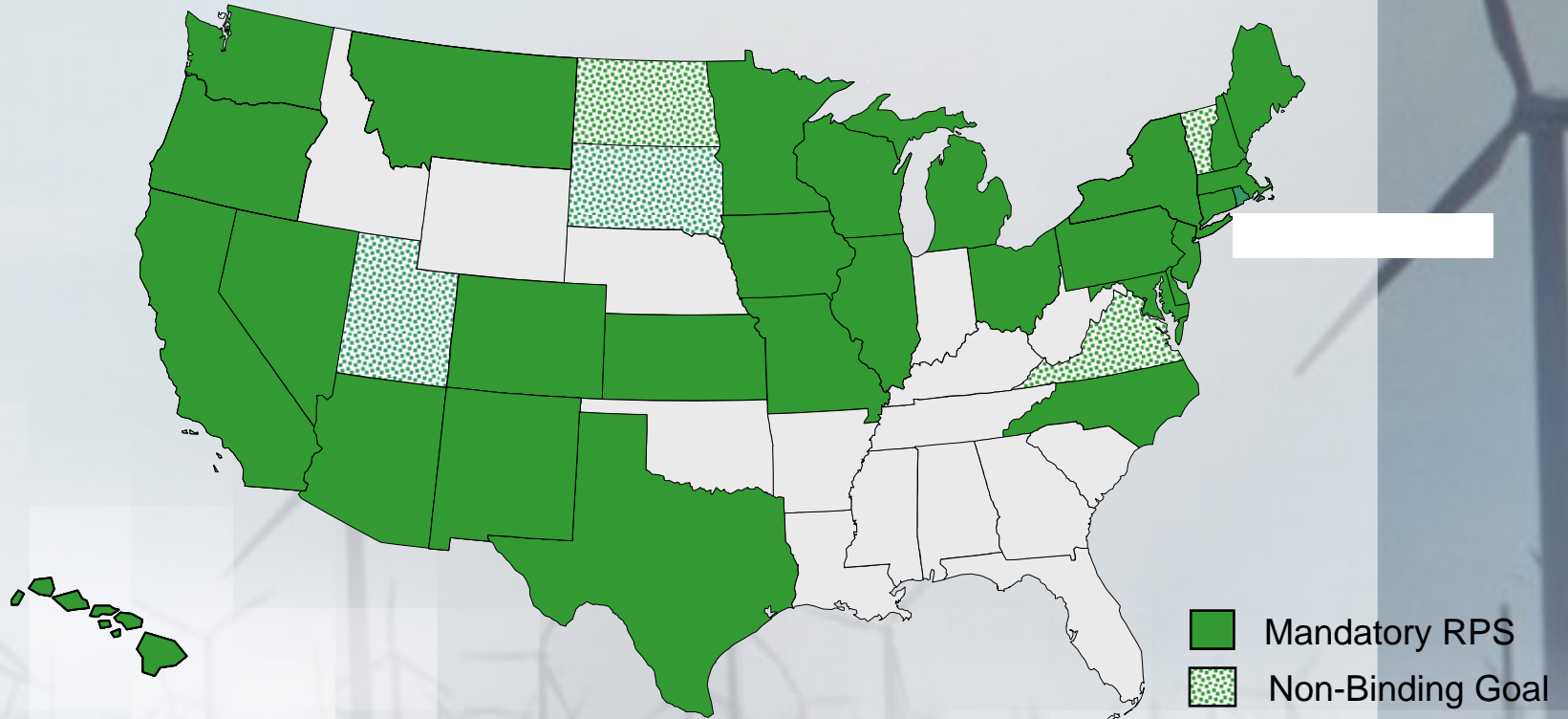


Project Phases

The background of the slide is a photograph of a wind farm. The sky is a pale, overcast blue. In the foreground and middle ground, several wind turbines are visible, their three-bladed rotors and towers silhouetted against the sky. The image is slightly blurred, giving it a soft, atmospheric feel. A large, semi-transparent white rectangular box is overlaid on the left and center of the image, containing the title and the list of project phases.

- **National Research**
- **State Program Review**
- **State Survey of Success and Challenges**
- **Recommendations**
- **Next Steps**

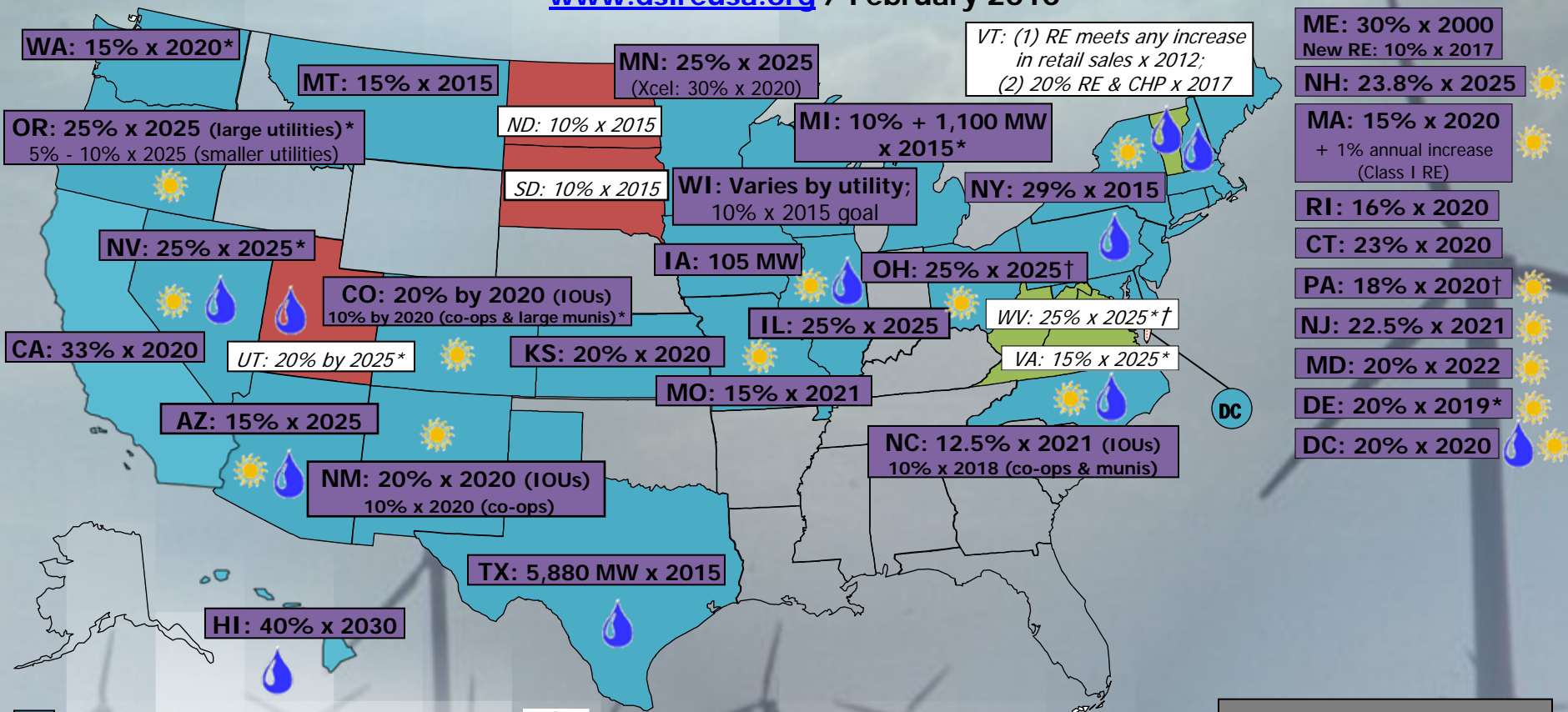
Conduct National Research



Source: Berkeley Lab

Renewable Portfolio Standards

www.dsireusa.org / February 2010



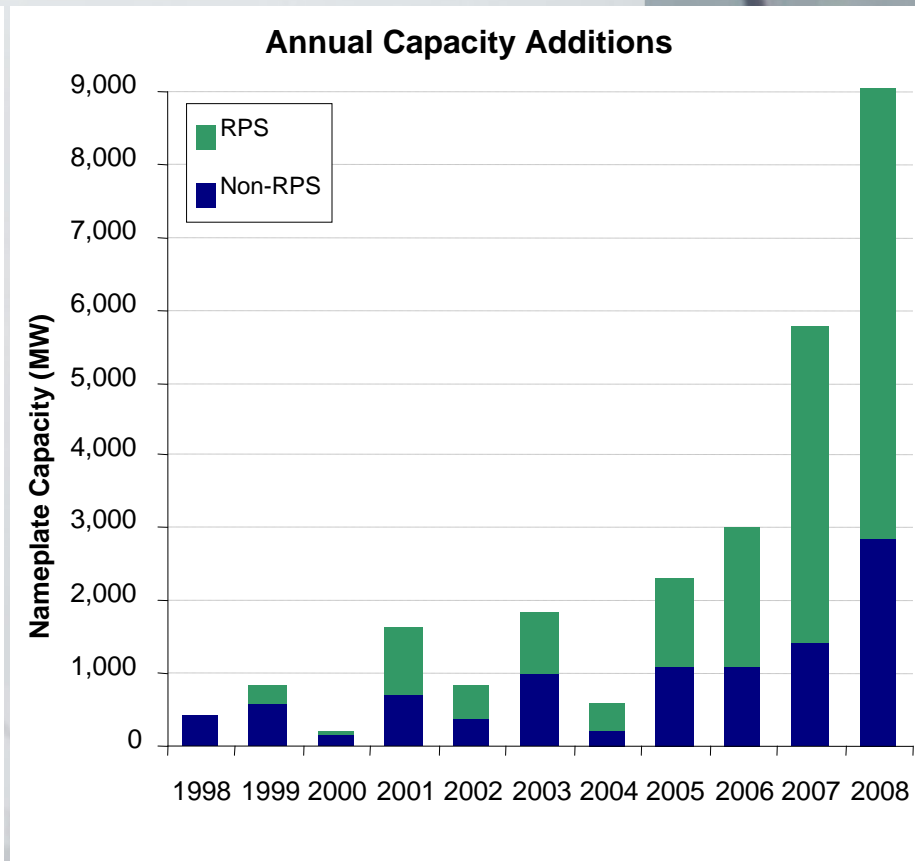
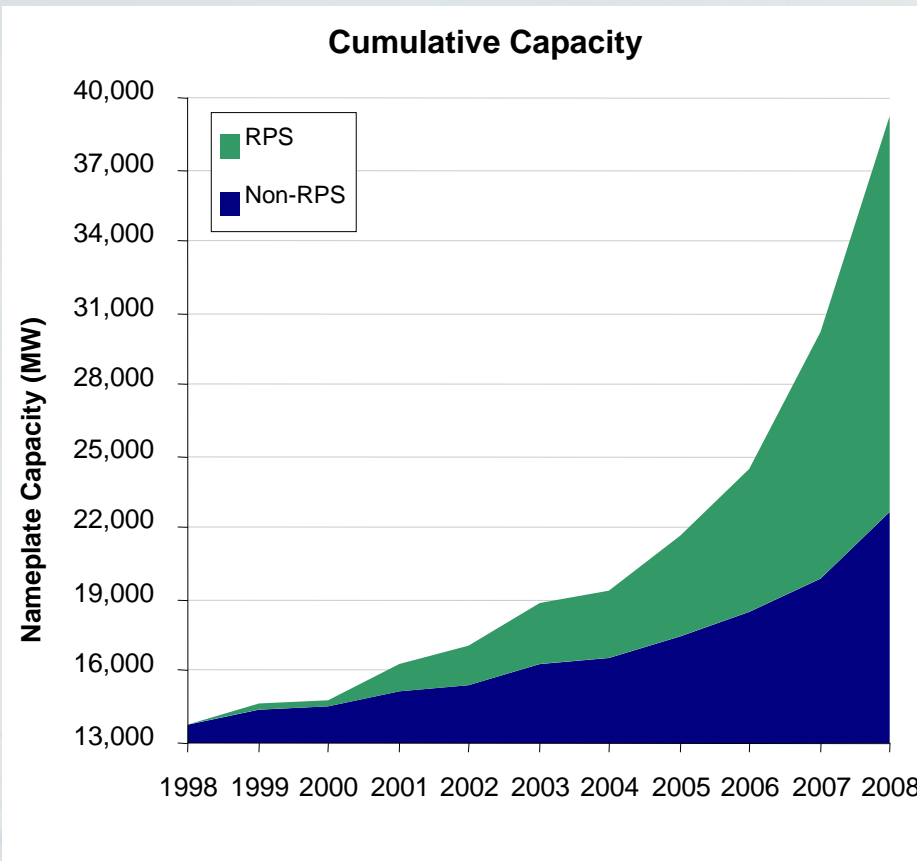
- State renewable portfolio standard
- State renewable portfolio goal
- Solar water heating eligible

- Minimum solar or customer-sited requirement
- * Extra credit for solar or customer-sited renewables
- † Includes non-renewable alternative resources

29 states + DC have an RPS
(6 states have goals)

CESA "State RPS' Continue to Drive Renewables Development"

Cumulative and Annual Non-Hydro Renewable Energy Capacity in RPS and Non-RPS States, Nationally

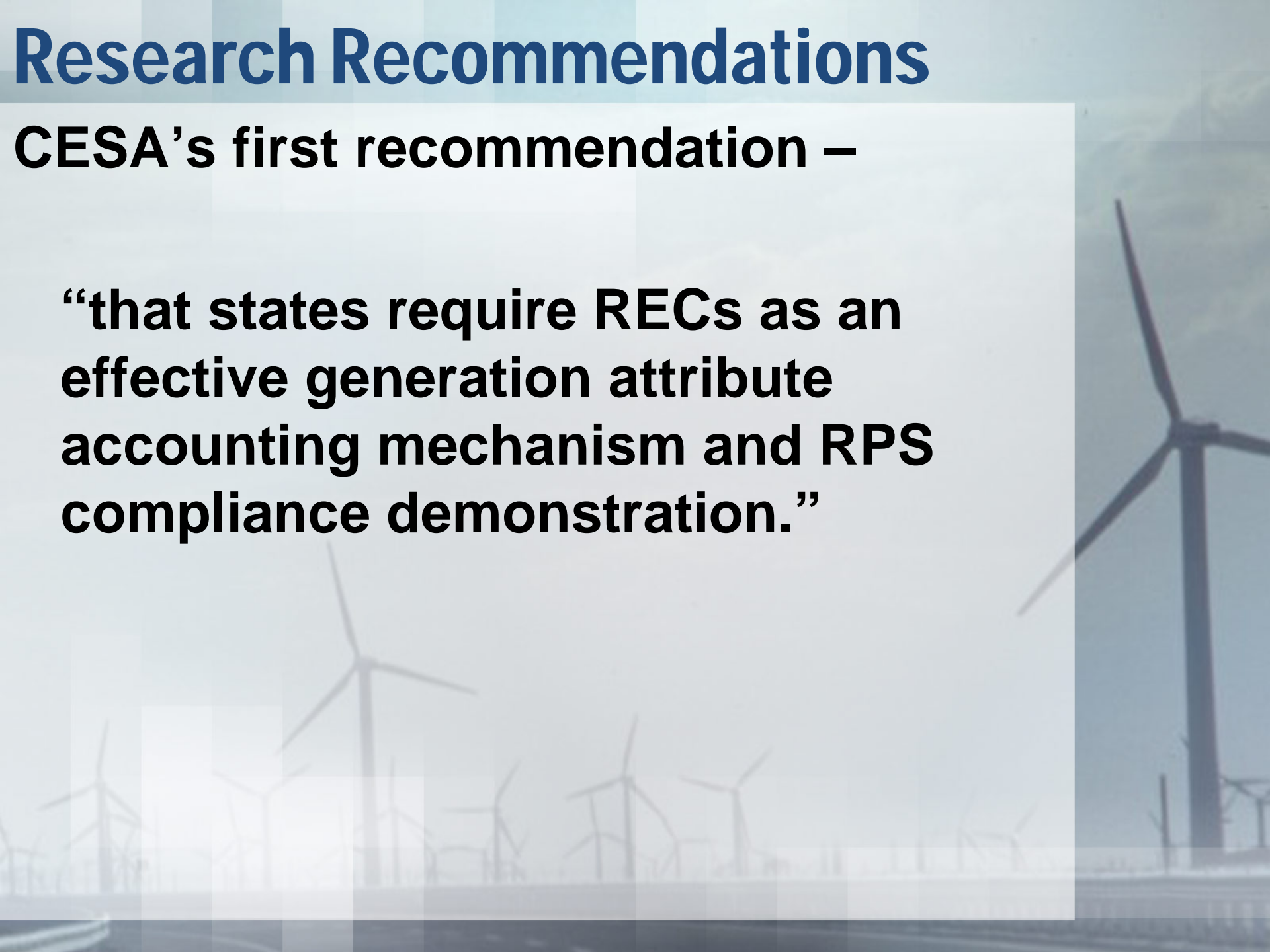


Note: Excludes wind development in non-RPS states used to fulfill other state RPS'

Research Recommendations

CESA's first recommendation –

“that states require RECs as an effective generation attribute accounting mechanism and RPS compliance demonstration.”



Research Recommendations

“The existing regional tracking systems – M-RETs or PJM GATS – can provide a good platform for states in the Great Lakes region to support a regional REC issuing and accounting system.”



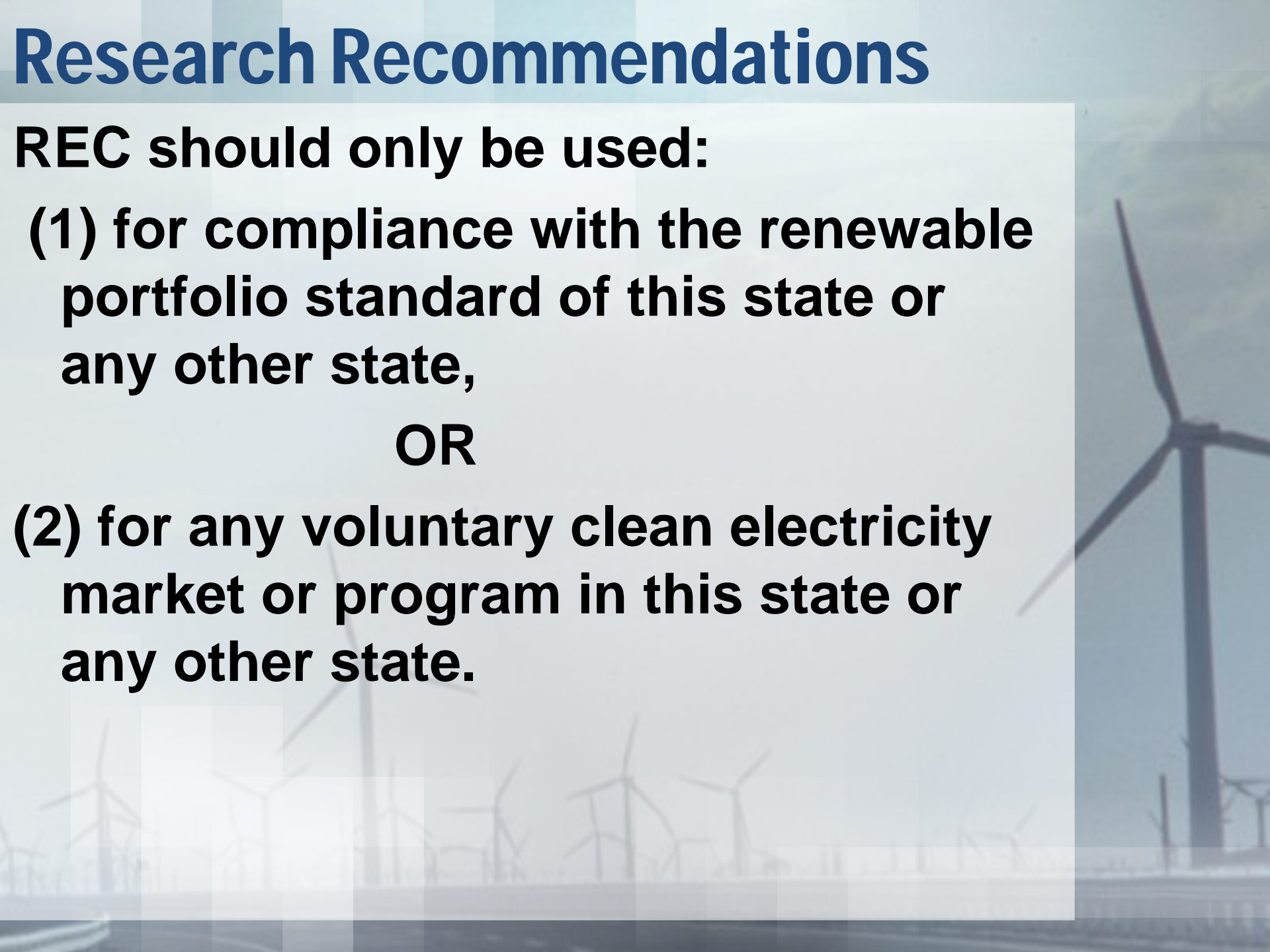
Research Recommendations

REC should only be used:

(1) for compliance with the renewable portfolio standard of this state or any other state,

OR

(2) for any voluntary clean electricity market or program in this state or any other state.



Research Recommendations

- **States use similar definitions for renewables- California Public Utilities Commission**
- **Life of REC- 3 years**
- **Energy efficiency should *not be integrated into an RPS- unless separate tier***

RPS Status

State of Illinois

25% by 2025

75% to come from wind

6% from solar PV

Administration

RECs 3 yr lifetime

Eligibility

Through 2011 eligible resources are in-state with cost-caps, then out-of-state

RPS Status

State of Michigan

10% by 2015

Administration

REC 3 yr. lifetime

Eligibility

In-state/out-of-state within service territory

1 REC from 1MWh solar = 3 credits

REC additions for Made in Michigan parts

RPS Status

State of Ohio

25% by 2025 from alternative energy (half of which is renewable energy)

.5% from solar energy by 2025

Administration

REC Lifetime of 5 yrs.

Eligibility

Min. 50% renewable energy req. from within state

Survey of states

- **Measure of Success**
- **Challenges**
- **Regional Market Development**



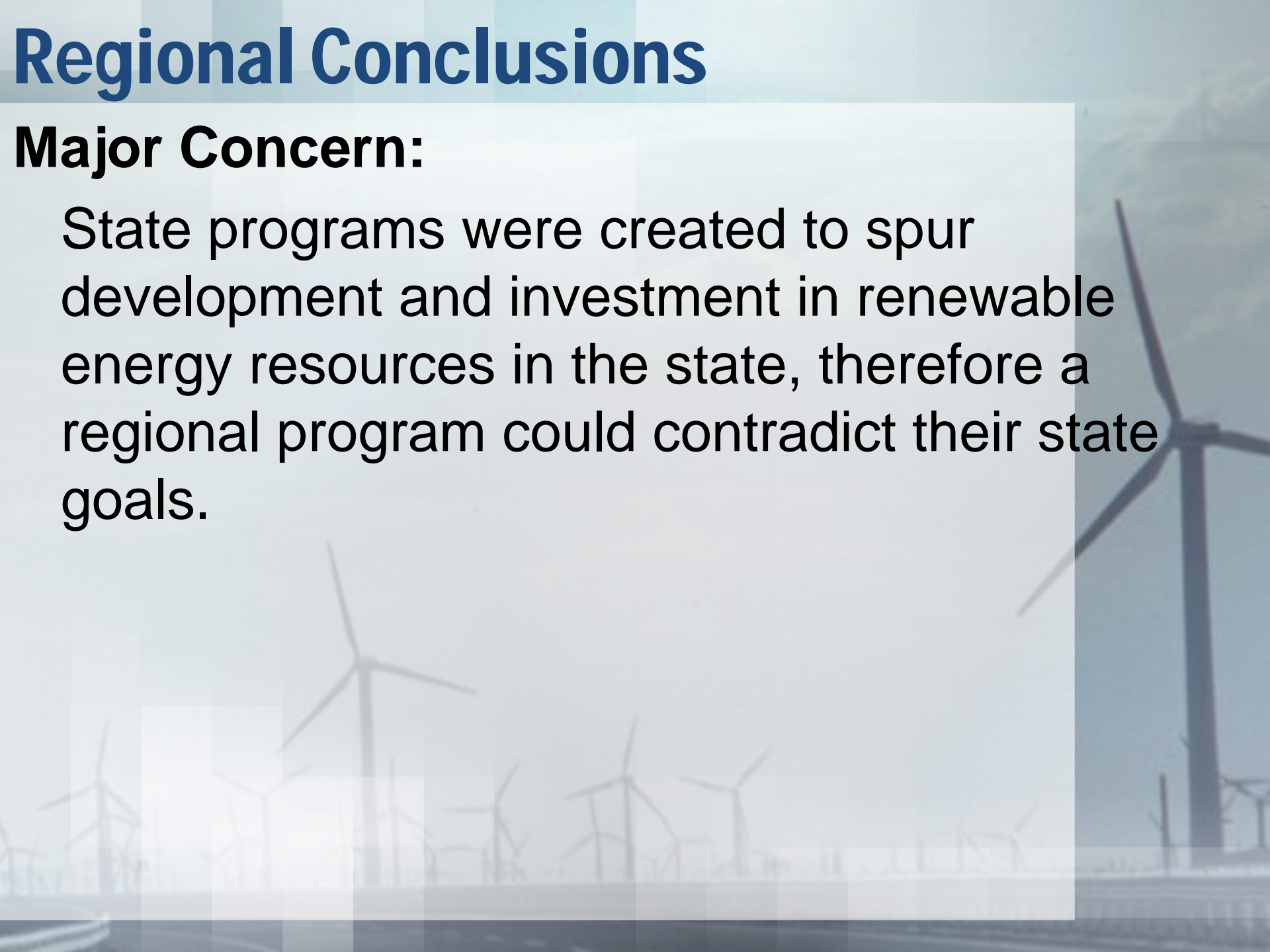
Survey Results- State level

- **States are focused on state RPS compliance**
- **Too early to tell.....anything.**
- **Concerns about meeting requirements**
- **Cost Caps forcing low cost purchase**
- **Indiana – “Does not need RPS for development.”**

Regional Conclusions

Major Concern:

State programs were created to spur development and investment in renewable energy resources in the state, therefore a regional program could contradict their state goals.



Regional Thoughts

“Creating a regional/national market could make RECs easier to track and offer a low cost alternative to high cost transmission, like the transmission necessary to bring wind power from the Dakotas to the East. A larger program could allow states to specialize in what is there locally.”

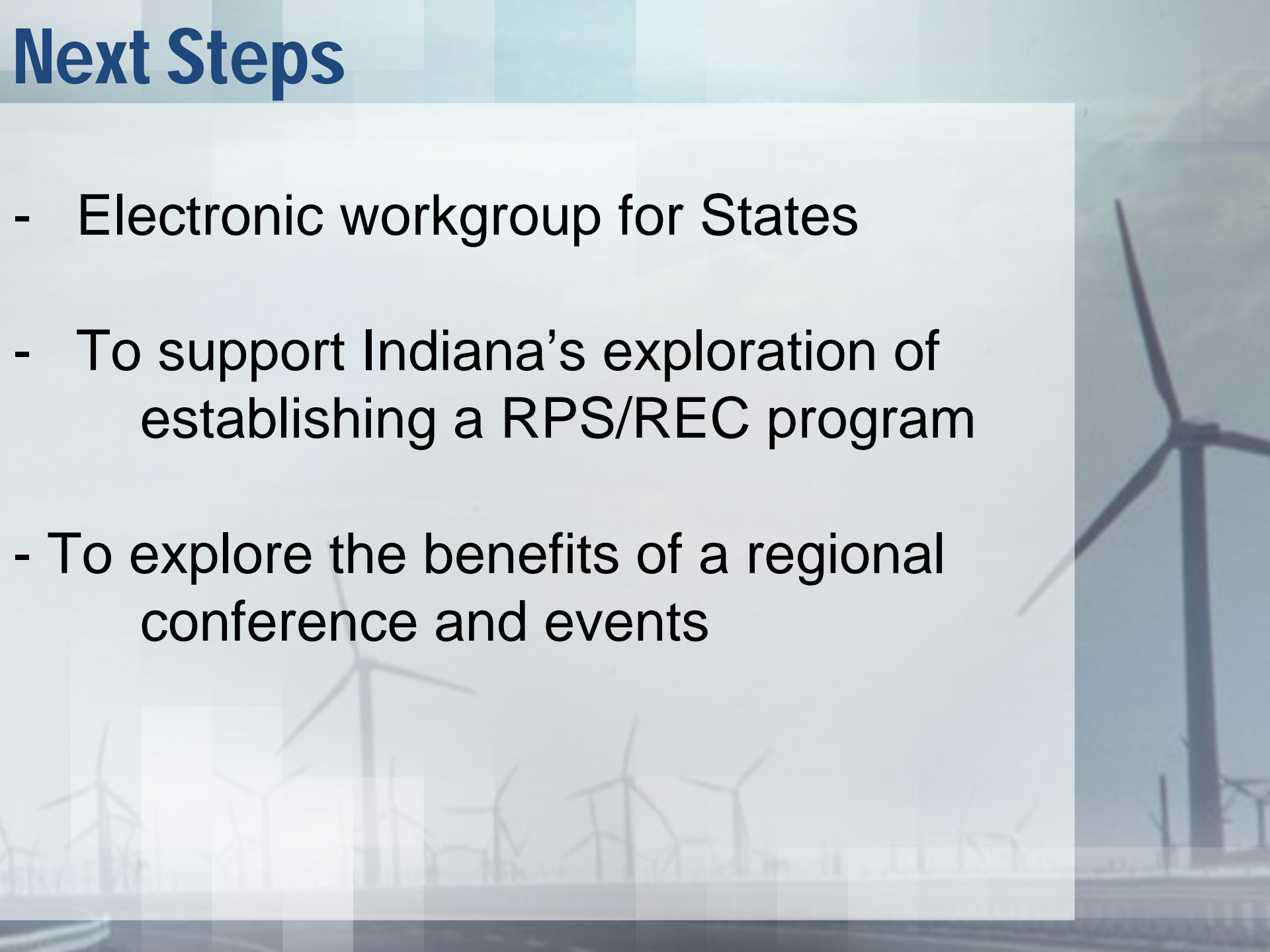
Regional Results

“As the Federal energy programs are developed and the US commitment to renewable energy generation and manufacturing increases, GLREA is aware of the need for greater assistance at the regional level to increase states’ regional ability to address renewable energy generation monitoring, development, reporting and transmission.”



Next Steps

- Electronic workgroup for States
- To support Indiana's exploration of establishing a RPS/REC program
- To explore the benefits of a regional conference and events



Contact



Michigan Wind Energy Conference

April 20th and 21st

Cobo Hall, Detroit

- **Jennifer Alvarado, Executive Director**
- **jennifer.alvarado@glrea.org**
- **www.glrea.org**
- **517.646.6269**