



# Automating Lease, Land, and Royalty Obligations to Reduce Operational Expenses

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## Background

As the federal Production Tax Credit (PTC) for wind and Investment Tax Credit (ITC) for solar subsidy, clean energy companies face increased pressure to boost profitability from their assets. Knowing what one owns and managing operations efficiently remains critical to success, whether in wind or solar farm development, commercial operations, or asset management.

## Objective

Global leaders in renewables harness technology to connect employees with real-time data and a common visual language, in order to simplify land asset management. We identified five business cases common to top renewables companies and determined how they make their organizations smarter by using land management and GIS (Geographic Information Systems) software to combine mapping and advanced analytics.

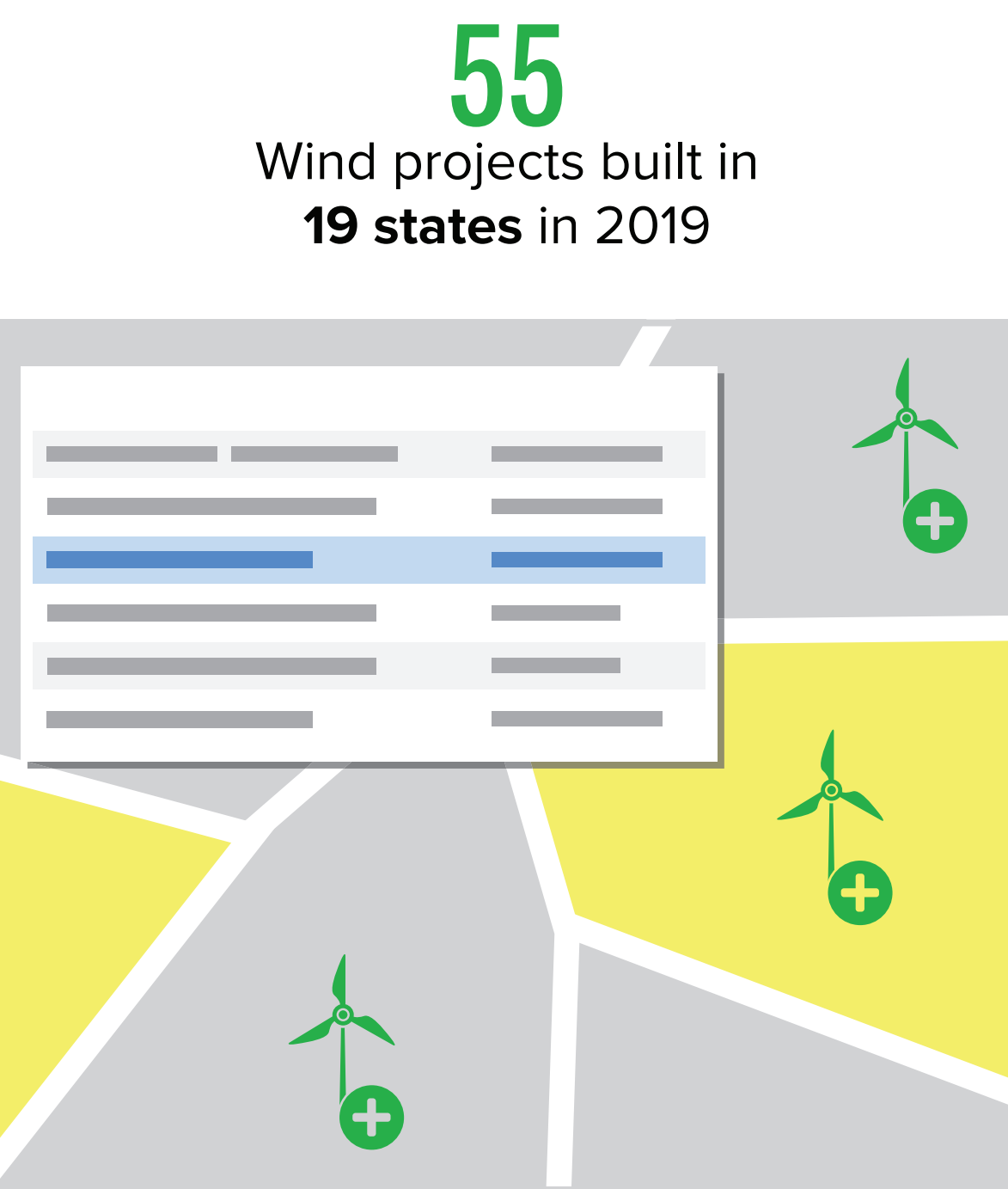
## Methods

- Identified five leading renewables companies that use software to automate lease, land, and royalty obligations.
- Four of the participating companies are listed in AWEA's top 25 cumulative wind operating capacity owners in the U.S.
- One participating company is a leading renewable energy provider in Canada.
- Interviewed stakeholders at the five participating companies.
- Conducted focus groups with 14 clean energy companies using land and GIS software.
- Surveyed land and GIS professionals working on renewable projects.
- Analyzed industry data from multiple sources.

## Business Scenarios

### 1 New Development Projects

**CHALLENGE**  
New development projects require multiple parallel workflows, making determining project status difficult.



**SOLUTION**  
Maps solve that challenge. They can show each workflow as a series of color-coded tasks and allow each tract to display in the color of the last task completed in that workflow. Toggle between workflows to instantly view where each tract is in the appraisal process, contract negotiation, etc. With map data live-linked to land records data, the company gets real-time project status maps.

### 2 Renewable Asset Mergers & Acquisitions

**CHALLENGE**  
Acquisitions generate the need for quick digital record creation.



**SOLUTION**  
A renewables company with over 15 GW in development uses GIS tax parcel information to create new records in the land system, reducing data entry time by a factor of nine. It takes minutes to load multiple parcels and create new wind farm projects - complete with polygons, landowner details, and legal descriptions.

### 3 Growing Operations

**CHALLENGE**  
As companies grow, their analytics should scale up to match or exceed.

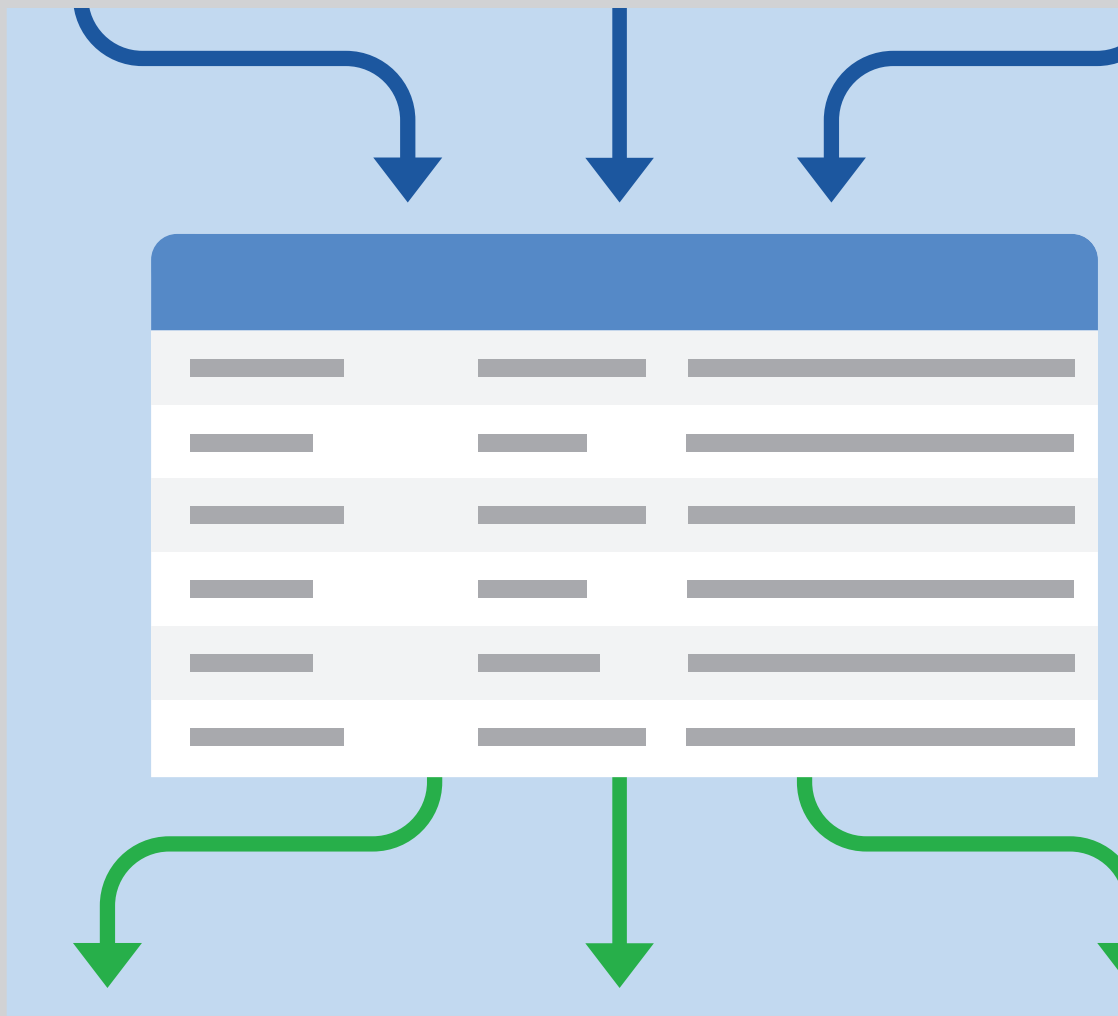


**SOLUTION**  
One of the world's largest wind power producers, with operations on three continents, uses first tier querying to drive both canned and custom reports so they can drill down to the data view they want. Dashboards roll up data from all levels of reporting and display it in lists, graphs, and charts, to answer timely questions like "What is the status of my assets today?" and "What tasks do I need to complete to maintain my land rights?"

### 4 Paying Complex Royalties

**CHALLENGE**  
Complex royalty payment calculations can be error-prone and labor intensive.

In 2019 U.S. wind projects paid over **\$700M** in landowner lease payments



**SOLUTION**  
A major North American company, with about 30 GW of solar and wind projects, uses land management software to automatically import production and sales data to generate production royalties. Calculation spreadsheets attached to each lease auto-calculate what each payee should receive.

### 5 Landowner Communications

**CHALLENGE**  
Landowner communication is key to maintaining land rights.

**Private land** is home to **99%** of operating wind turbines in the U.S.



**SOLUTION**  
One producer, with wind farms in six states, uses its land system to auto-generate payee remittance letters. For each wind farm, all the royalty payments for the quarter are processed with the click of a button and letters are generated that include details about how each landowner's payment was calculated. Payment variables are pulled from the database, and the letters are customized with the company logo and wind farm name.

## Recommendations

- Use GIS to make better business decisions in all phases of your project.
- Leverage the power of an integrated land and GIS system to create new records quickly and easily.
- Maximize insights with more ways to view data – with maps, robust reporting, and dashboards.
- Look for software that can automatically calculate royalty payments based on multiple payment variables.
- Streamline landowner communications with mail merge letters.
- Take your contracts digital – connect land records to document management and accounting.
- Reduce IT footprint by choosing a software provider with cloud services.
- Look for a solution with least customizations required in order to benefit from low cost automatic updates.

## CONCLUSION

Integrated land management and GIS software help top clean energy companies solve common industry challenges.

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Reference:  
AWEA Wind Powers America  
Annual Report 2019