BRIGHTNIGHT
Power when you need it

Hop Hill Solar and Storage Project

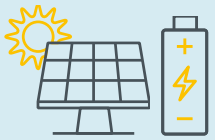
January 18th, 2023

BrightNight – A Renewable Power Solutions Company

BrightNight is a founder owned renewable independent power producer (IPP) focused on providing its customers and partners with differentiated solutions with a focus on safety, value, reliability and best-in-class execution

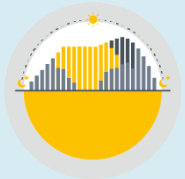
Differentiated customer solutions for renewable power

Operating under an integrated development & IPP model



Integrated solar & storage

Hybrid projects (Complementary Resources)



Dispatchable Solutions

Well-capitalized with experienced partners

GLOBAL INFRASTRUCTURE PARTNERS

CORDELIO POWER

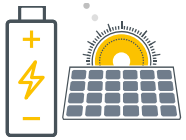
CPP INVESTMENT BOARD

World-class team

Led by Martin Hermann

21 GW project portfolio

2 GW project portfolio



Renewable Dispatchable Capacity

Meeting today's power demand and sustainability goals

PowerAlpha

Our proprietary software provides a tailored analysis for customers to uncover the highest value project and to optimize asset management

Customer-centric

We learn about your goals and challenges to design a renewable solution not just a project

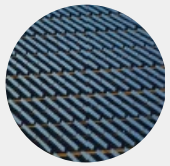
Single Point of Contact

Leading you through project design, contracting, development, operation, maintenance, and lifelong optimization

BrightNight's proprietary PowerAlpha™ enables differentiated renewable energy product offerings that are tailored to customer needs

Generation | Storage | Markets

Solar

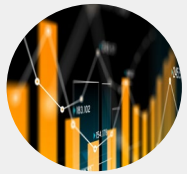


Wind

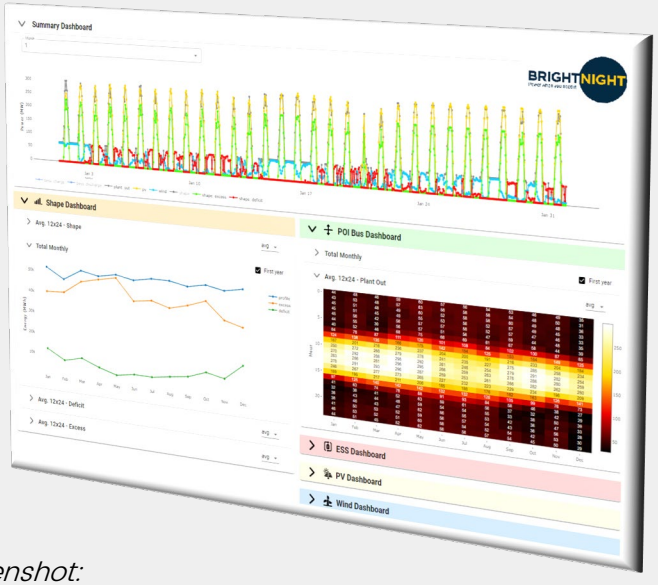
Nuclear, Hydro, Thermal

Storage

Markets

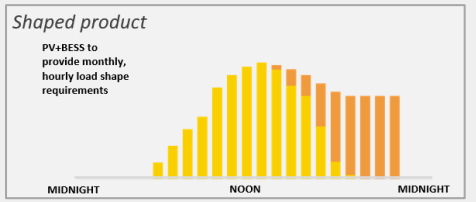


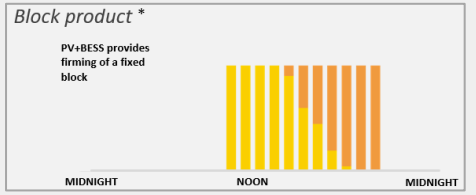
- Optimized product design
- Driven by customer needs and use-cases
- Meets sustainability, reliability, and market participation requirements
- Sourced from dispatchable renewable power plants at industry-leading costs



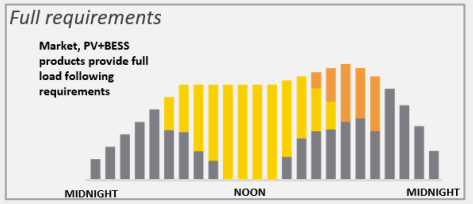
Screenshot:
BrightNight's PowerAlpha™ design, dispatch & control software

Customer and Value-Focused Solutions

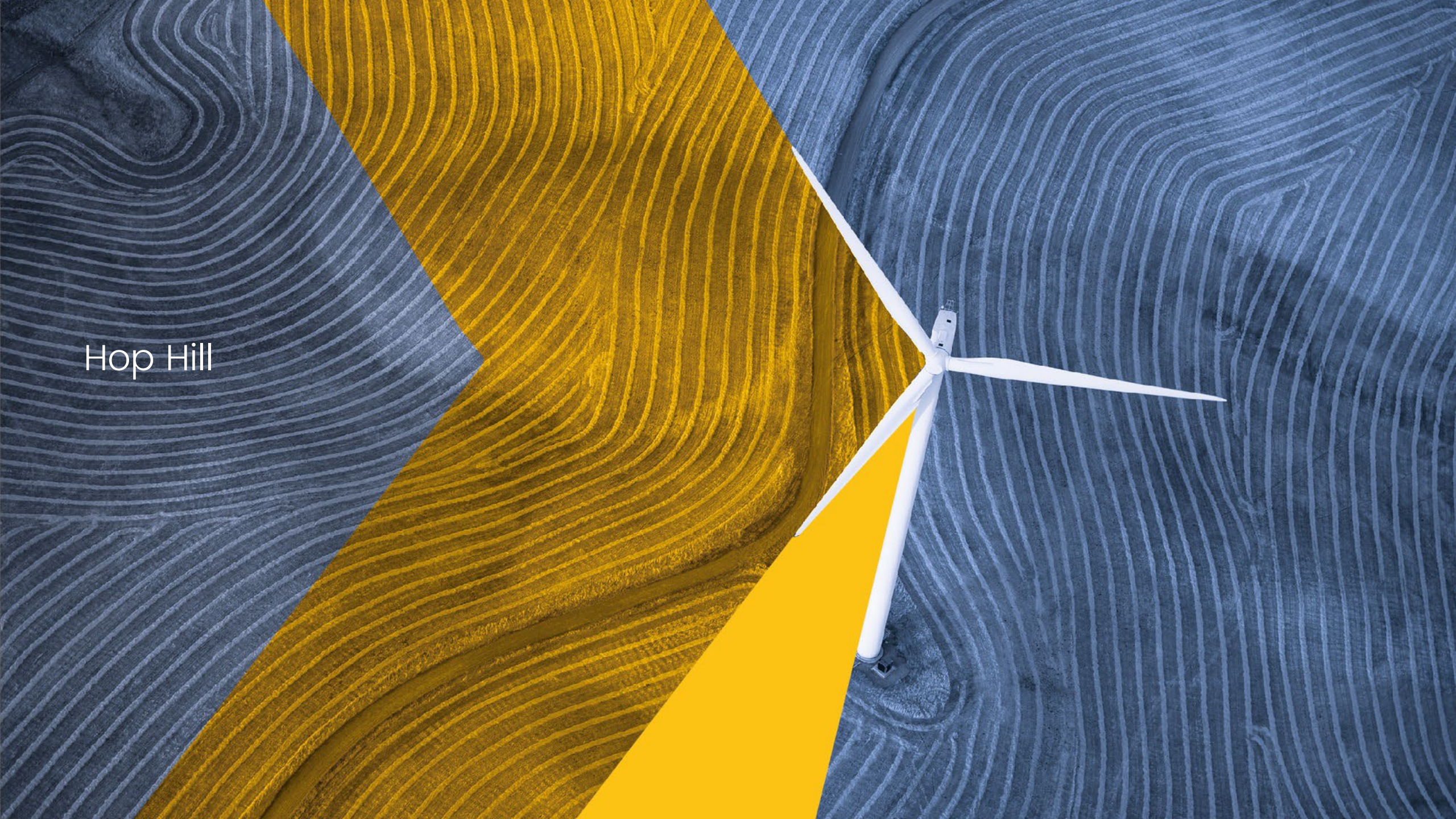




*Including 24x7



- Cost-effective
- Carbon free
- Reliable
- Dispatchable options
- Volumetric and timing options


Hop Hill

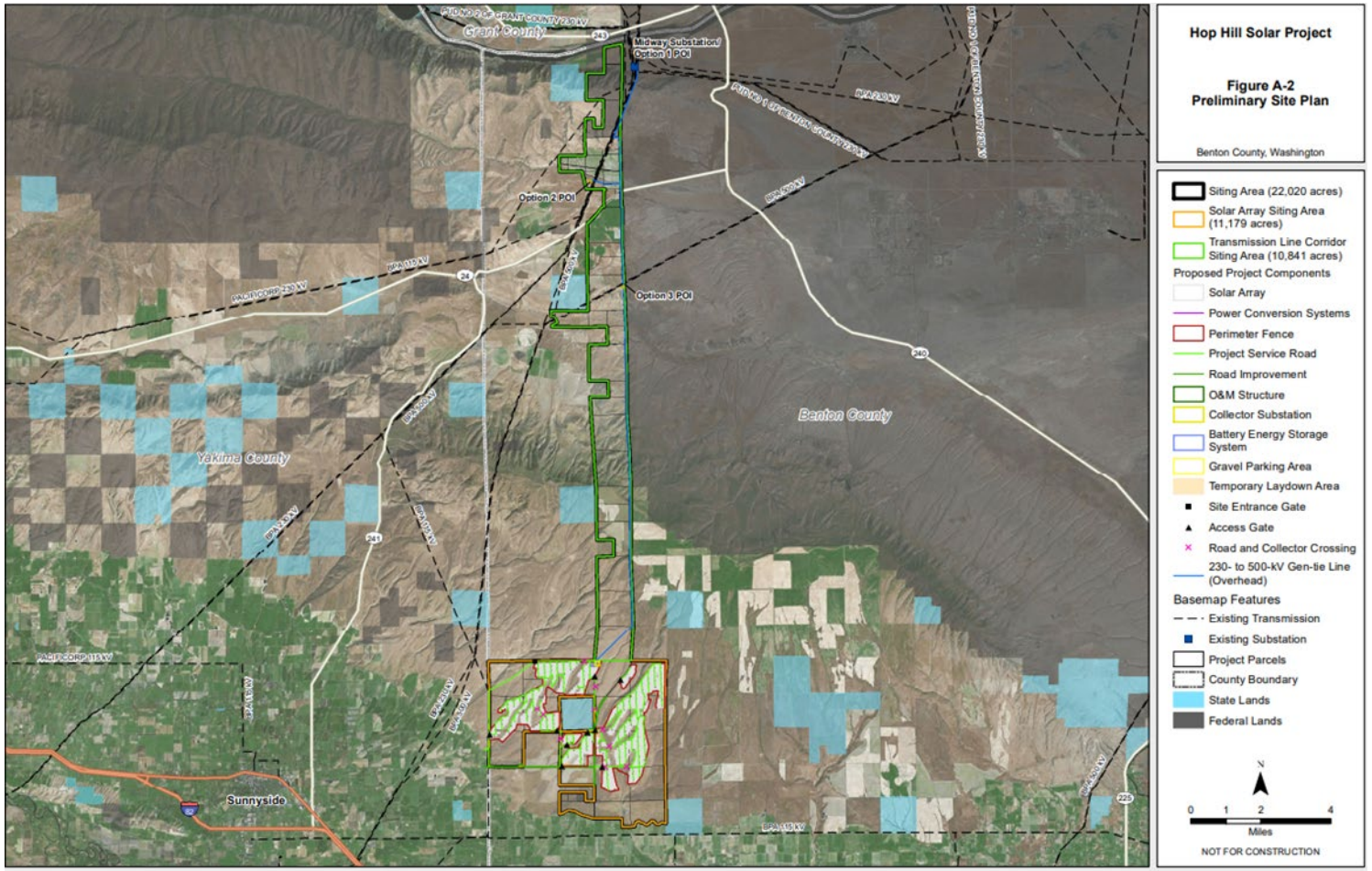
Hop Hill Solar and Storage Project
Central Washington, Benton County

- **Project Size & Design**
  - 500MW Solar Photovoltaic System (PV) with Battery Energy Storage System (BESS)
  - Fenced Area: ~5,000 acres
  - Three BPA interconnection options
- **The Project was developed with four main goals in mind**
  1. **Low-Cost Reliable Energy:** Deliver low cost and dispatchable renewable energy near the Columbia River's Northwest hub to complement existing hydroelectric and nuclear resources and help meet the region's growing electrical needs.
  2. **Avoid Expensive and Lengthy Infrastructure Projects:** Utilize existing electrical infrastructure more wisely to reduce customer energy costs, minimize the need to build new large transmission lines throughout the region, and deliver energy to end customers in the near term instead of waiting for 10 to 15 years for transmission projects to be built.
  3. **Minimizing Natural Resource Impacts while Maximizing Community Benefits:** Build on non-irrigated low productivity disturbed grazing land outside of high value habitat areas while generating long-term economic benefits.
  4. **Maintain Productive Nature of Land:** Construct a project that help creates a new standard for Washington solar energy in which PV generation and agricultural production can work in concert with each other instead of conflict.

Hop Hill Layout

Design Considerations

- Natural Resources
- Cultural & Archeological Sites
- Water Resources
- Visual Impact
- Topography
- Agricultural Operations



Setting the new standard for renewable development: Agrivoltaics

"Solar panels are farm equipment, and the sun is a farm resource"

Improving the productive nature of the land

- Up to a 300% improvement in water conservation*
- Up to 2X plant growth*

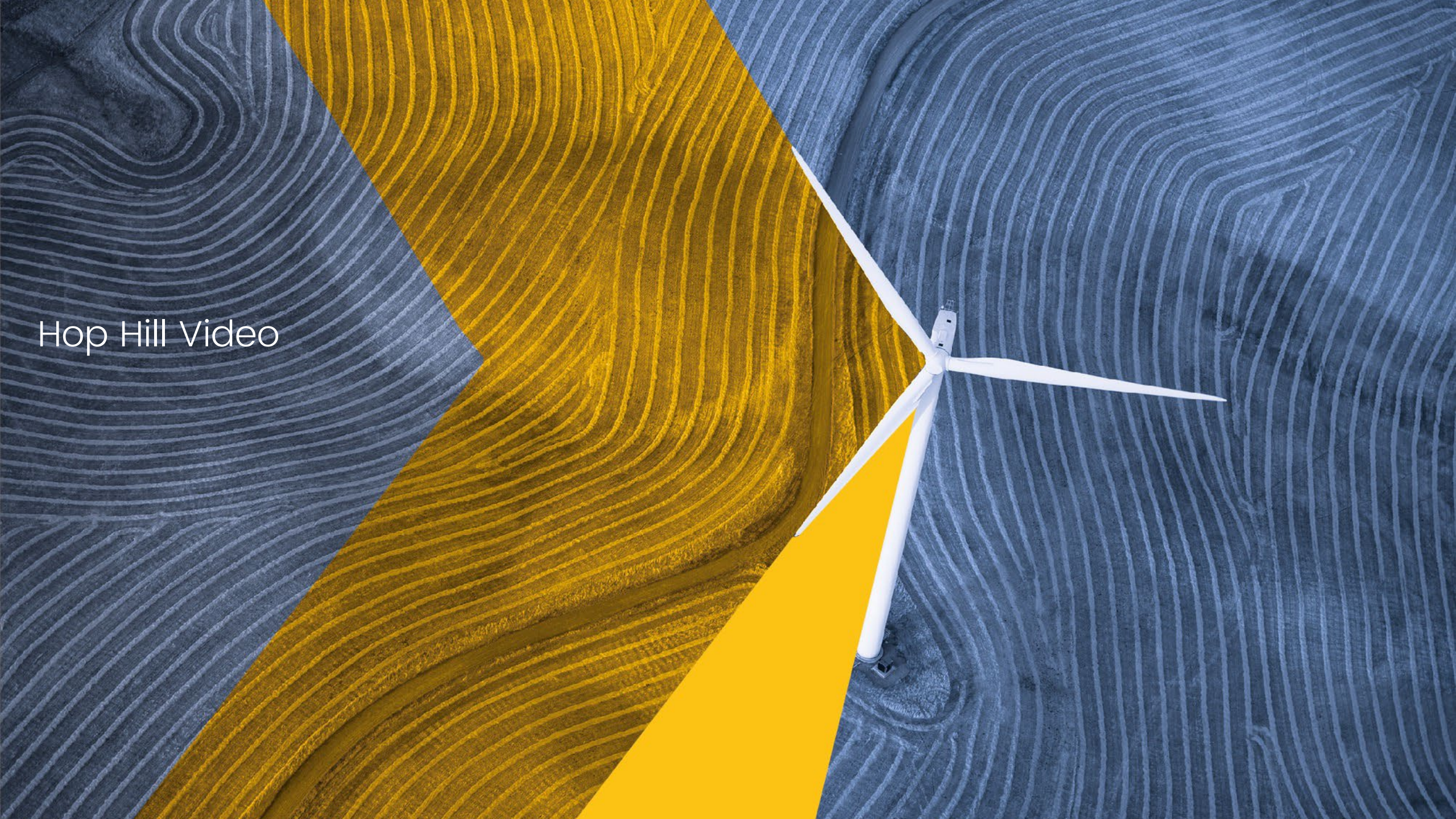
Restoring historic sheep operation

- Landowner's family has historically raised sheep since original homesteading of property
- Landower will own and run the restored sheep grazing operation

Supporting future agrivoltaics in the PNW

- BrightNight will support and fund a research project through a local university to study the impact of co-use on plant nutrient transport

*Sources: https://www.nature.com/articles/s41598-021-86756-4
https://pubmed.ncbi.nlm.nih.gov/30383761/


Hop Hill Video

Hop Hill Video

https://www.youtube.com/watch?v=83ZqLGvuGyc