# ENERGY FROM THE WIND

## WHY THREE BLADES?

Three blades is the best number for keeping the **turbine moving efficiently** - but not too fast to be out of control.

- Turbines are a well-developed technology
- Variable power source (weather changes)

Photo from Nome, AK

Photo from Kongiganak, AK

Trained community members perform frequent inspections

## HOW WINDY IS TOO WINDY?

Wind turbines work **best** to generate electricity in wind speeds around **30mph.** When wind speeds are too high, the blades stop spinning to **lower the risk of needing repair** and to save the durability of the turbine.

- Long lifespan (avg 20 years)
- Requires maintenance

Photo from Kongiganak, AK

## WHY AM I NOT SEEING CHEAPER ENERGY WHEN THE BLADES ARE SPINNING?

It's complicated, but some of the factors include **Power Cost Equalization reimbursements, utility expenses, policies, and not enough excess energy** for additional electrical applications.

- Zero carbon emissions
- Additional energy storage may be required

## WHAT CAN WE DO?

1. **Talk with** local & regional energy professionals in your community!
2. **Ask** your energy professionals about training to safely climb and work on technical components of turbines

SCAN ME

## DID YOU KNOW?

Here's looking up from the **inside** of a 100kW turbine tower in Unalakleet

121 feet tall ≈12 basketball hoops!

UAF University of Alaska Fairbanks | ACEP Alaska Center for Energy and Power

QUYANA. THANK YOU.

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