Economics of Wind Energy
Simple Checklist

1. What is the purpose of this wind turbine? What do you want to power? Your whole house, just the garage, the barn?
2. Look at your electric bill – how much electricity do you use?
3. Electricity conservation and efficiency – do all you can to use less!
4. Measure the wind – understand how windy it is at your location to know if wind turbine will be able to do what you want it to do
5. Talk to your local zoning and planning boards to understand how (or if) you can permit your project
6. Talk to your electricity provider about interconnection and net metering
7. Research local, state and federal incentives and grants to help defray the cost
8. Find an installer that you trust to help you choose the turbine for you and install it at a reasonable cost

Words of advice

Match your turbine to your:
1. energy needs
2. wind speeds
3. budget
Cost

- **Residential wind turbine (1-20kW):** $10,000-75,000 installed
  - Most of the cost is in the tower
  - Production vs. height
- **Small commercial wind turbine (20-100kW):** $75,000-650,000 installed
- **Community scale wind turbine (100kW-1.5MW):** $650,000-5,000,000 installed
- **Large scale wind turbine (1.5-10MW):** $3,000,000-8,000,000 installed (per turbine in a farm)

Words of advice
- Match your turbine to your:
  - energy needs
  - wind speeds
  - budget
- Go to [http://nextstep.cisat.jmu.edu](http://nextstep.cisat.jmu.edu) for an online tool to help!
Policies and Incentives

- Net metering
  - Co-ops/municipalities not required to offer net metering
  - Details: limits, credit or check, buyback rate
- Tax credits/rebates
- Check with county planning office
  - Height restrictions
  - Permits
  - Zoning
  - Setbacks
- Utilities
  - Interconnection
Questions?

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Skype us via VACenterforWindEnergy to ask questions or just chat with us!