

Building Off-Grid

What? Where? How? & Why

Date: April 25, 2019

Utility Energy Forum

Agenda

- What
- Where
- How
- Why
- Obstacles



What?

- Dream house
- Building a healthy house at a price that won't make you sick
- Building off-the-grid in Colorado
- Off-grid technologies



Where?

- Mountain terrain, vegetation, altitude
- Wildlife
- Climate – HDD, CDD, snowfall











How?

- Type of construction
- Type of windows & doors
- Roof
- HVAC
- Lighting
- Electricity
- Water
- Sewer



Why Off-Grid?

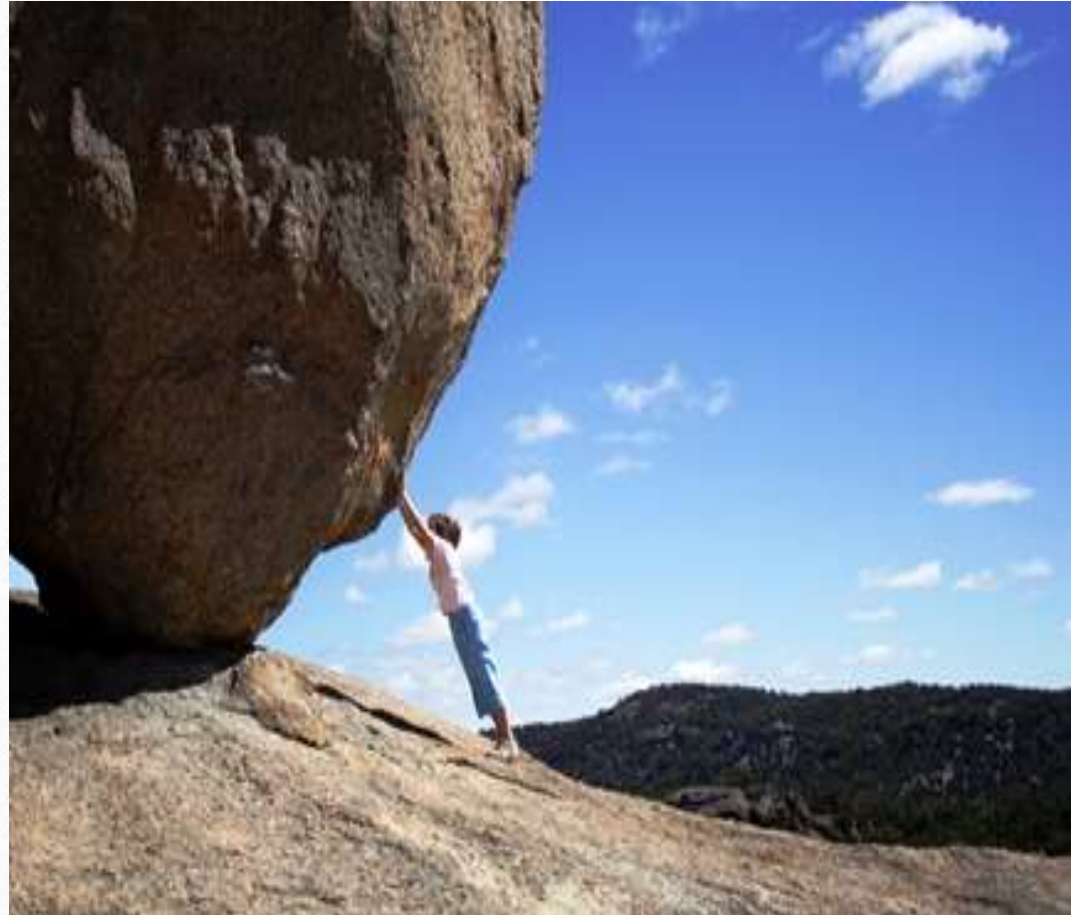
- Connection fees
- Utility resource mix
- Utility policy toward renewables
- Utility load shape and history
- Existing utility rates
- Regulatory bodies moving too slow
- Eliminate the monthly bill
- Long-term savings
- No rate increases for 30 years
- 100% clean renewable energy
- Independence
- Technology improvements
- Utility customer dissatisfaction
- Utility not transitioning to clean energy

Why Off-Grid?

- Local suppliers and service
- Reliability
- Greater control & efficiency
- Utility not ready to partner
- Utility system not built for 2-way flow of electrons
- Resale value of the home
- Aesthetics
- Outage mitigation
- Opportunity to integrate future technologies
- Environmental impact

Obstacles

- Financing
- Integration
- Finding vendors
- Permitting





Thank You

Questions?