How to Get a Deal Done: A Developer's Perspective

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Development Manager
August 25, 2011

Agenda

- Market
  - State of the wind industry
  - State of the solar industry
- Keys to Development

- Questions

Who we are

- Main business: Wind & Solar
  - Development
  - Construction
  - Asset Management
- Projects:
  - Exposure to 50 projects
  - **5,000+** MW globally
    - Including 2 turbines for NREL
- Currently constructing:
  - The 252 MW Cedar Point, in Limon Colorado.
  - The 35 MW Webberville Solar project in Austin Texas.

- Project list

RES AMERICAS PROJECTS

RES Americas projects under construction, constructed, and/or operated.
From 1997 to present.

5,225 MW

Wyoming–380 MW
- Mountain Wind I, Uinta County–61
- Mountain Wind II, Uinta County–80
- High Plains, Carbon & Albany Counties–99
- McFadden Ridge I–Carbon & Albany Counties–29
- Dunlap Wind Energy Project–Carbon County–111

Kansas–99 MW
- Central Plains, Wichita–99

Wisconsin–54 MW
- Butler Ridge, Dodge County–54

Nebraska–119 MW
- Ainsworth, Brown County–59
- Flat Water, Richardson (NE) & Nemah (KS) Counties–60

Pennsylvania–101 MW
- Armenia Mountain, Tioga & Bradford Counties–101

Oklahoma–326.5
- Crossroads, Dewey County–227.5
- Blue Canyon Wind Farm VI–99

Canada–202.1 MW
- SNEEC–4.1
- Talbot–99
- Greenwich–99

Washington–1,383 MW
- Nine Canyon I, Benton County–48
- Nine Canyon II, Benton County–16
- Nine Canyon III, Benton County–32
- Hopkins Ridge I, Columbia County–149
- Hopkins Ridge II, Columbia County–7
- Marengo I, Columbia County–140
- Marengo II, Columbia County–71
- Wild Horse, Kittitas County–229
- White Creek, Klickitat County–205
- Harvest Wind, Klickitat County–99
- Wild Horse II, Kittitas County–44
- Lower Snake River, Garfield County–343

California–208.2 MW
- Cameron Ridge, Kern County–60
- Pacific Crest, Kern County–47
- Hatchet Ridge–101.2

Colorado–254 MW
- NREL, Superior–3.8
- Cedar Point, Lincoln, Elbert & Arapahoe Counties–250.2

New Mexico–1 MW
- Llano Estacado, Curry County–1

Texas–2,077 MW
- Woodward Mountain, Pecos County–160
- King Mountain, Upton County–278
- Sweetwater II, Nolan County–92
- Sweetwater IV, Nolan County–106
- Sweetwater V, Nolan County–81
- Whirlwind, Floyd County–60
- Lone Star, Shackelford & Callahan Counties–400
- Hackberry, Shackelford County–166
- South Trent Mesa, Nolan & Taylor Counties–101
- Buffalo Gap III, Nolan & Taylor Counties–170
- Bull Creek, Nolan County–180
- Gulf Wind, Kenedy County–283

Jamaica–21 MW
- Wigton–21

Measurements in megawatts (MW)

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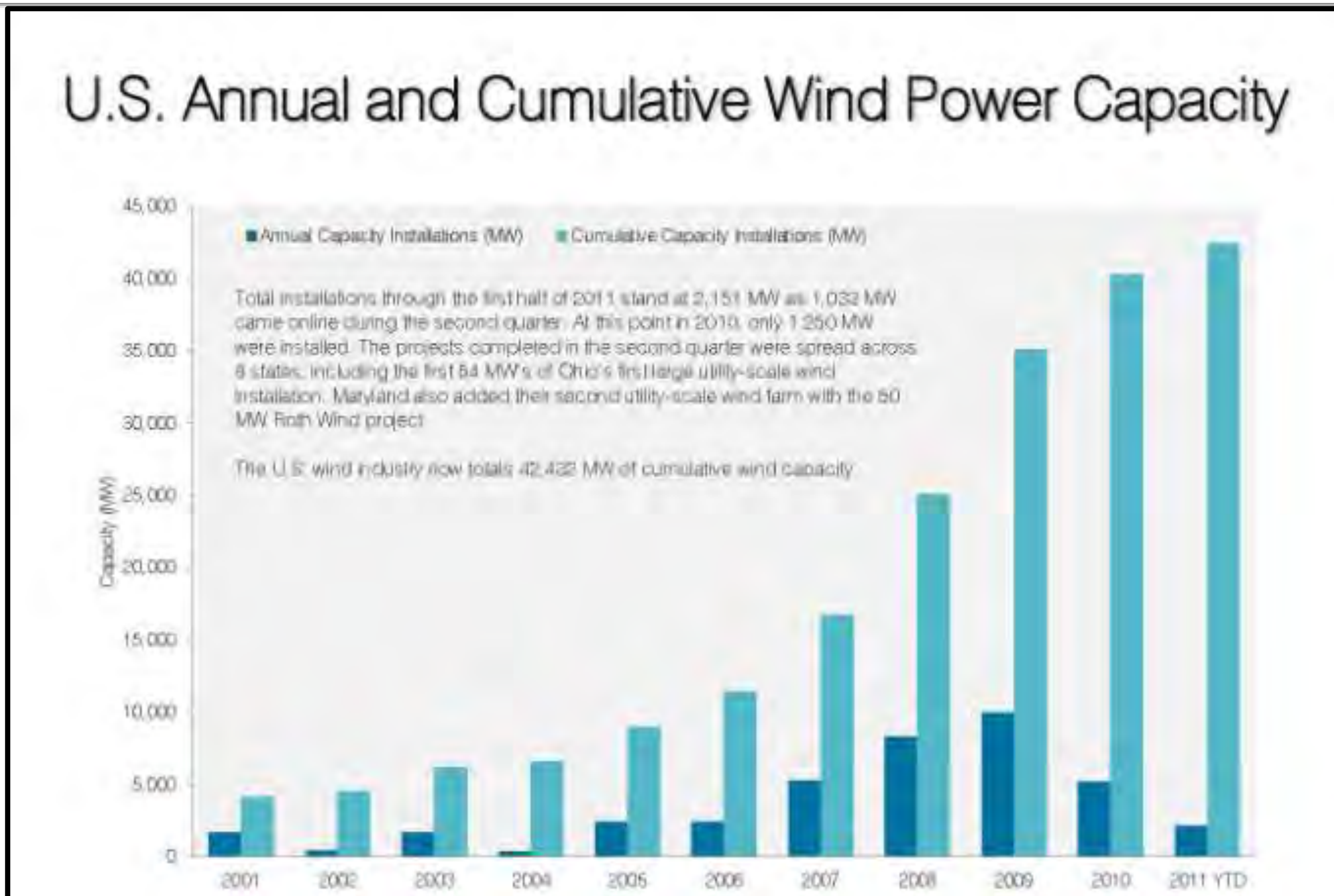
State of Wind Industry

res AMERICAS
powering change



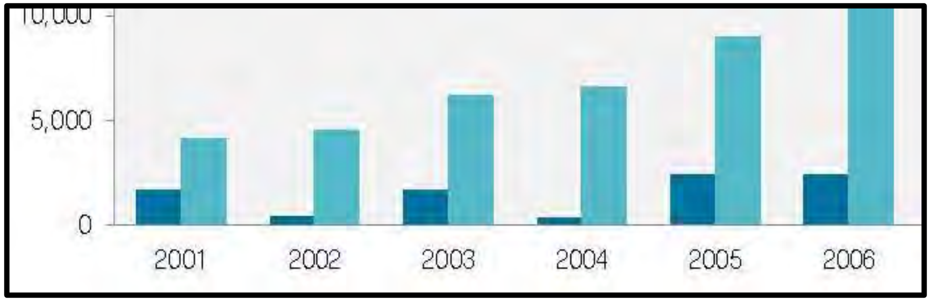
Source: AWEA

Renewables hindered by slow economic recovery. Overall energy demand is not increasing, thus RE demand is not increasing as expected and fewer MWs are being installed.

State of Wind Industry

powering change

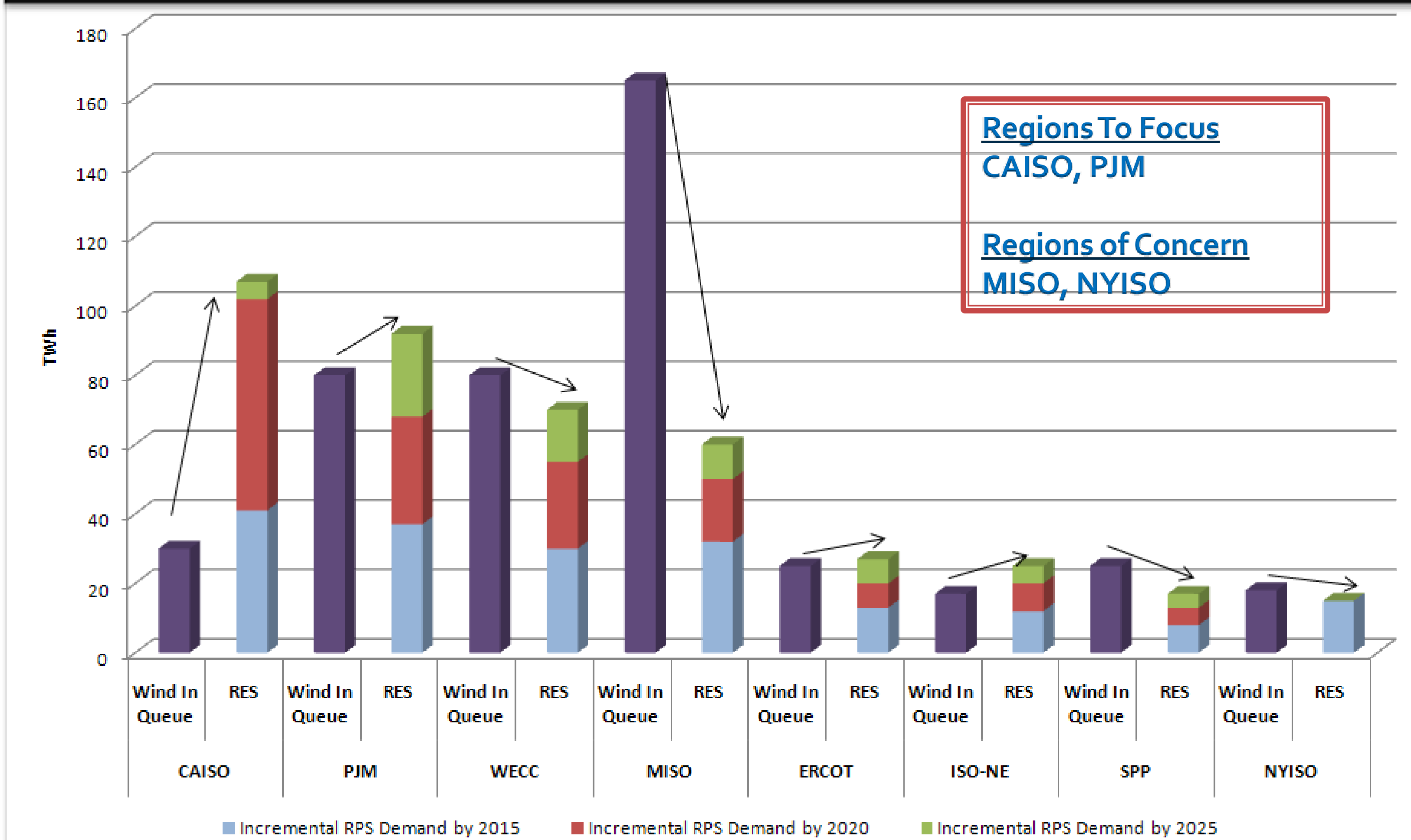
- PTC/ITC/Cash Grant
  - ITC & Cash Grant are likely gone…
  - Congress may or may not continue the PTC



- CA = ‘Golden Egg’?
  - the new 33% RPS is still too vague
- Economies of scale help wind economics
  - Although, transmission constraints may open window for smaller projects to get online

State of the Wind Industry

Development Pipeline in Various Regions vs. RES Demand



State of Solar Industry

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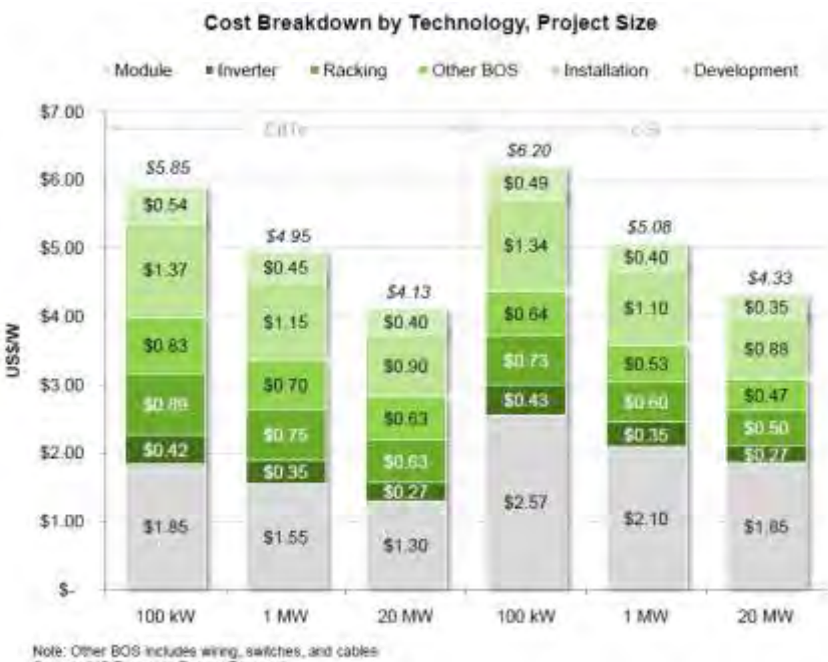
- PV installations

Source: GTM Research



- Economies of scale

State of Solar Industry

- PV panel pricing dropping
  - Sustainable? For how long?
- CSP hurdles
  - Price, Water, Lands
  - Storage?

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Transmission → Resource → Permitting → EPC → Community Outreach → Financing

- Questions

Transmission

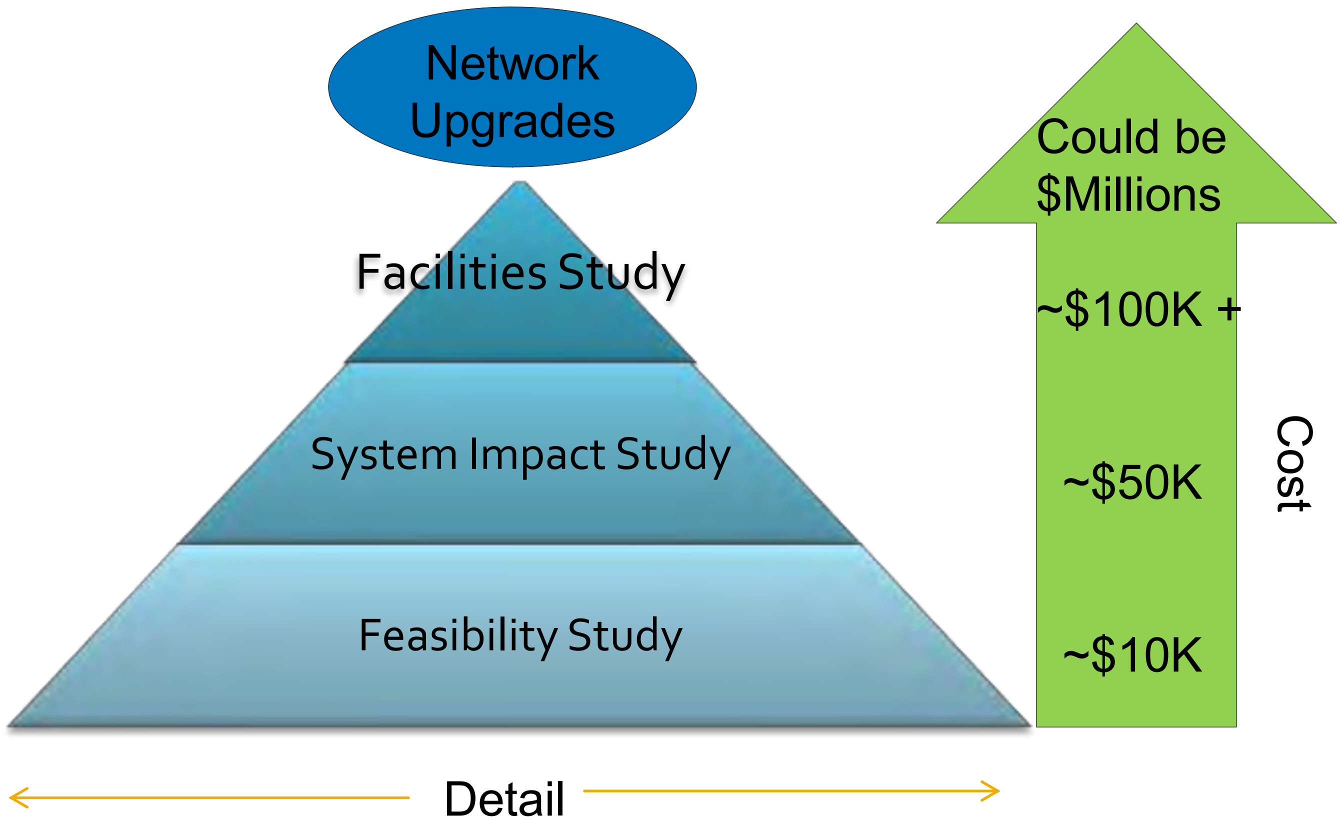
- Interconnect
  - Match output with availability
    - i.e. cost prohibitive to connect a 50 MW project to a 500 kV line
  - Length of gen-tie

~Price/mile for t- lines	Voltage
$200,000	69 kV
$350,000	230 kV
$450,000	345 kV
$1 million	500 kV

- Available Transmission Capacity (ATC)
  - Required to move power from project
  - Firm-transmission rights (wheeling); can be millions $$ per year
  - Ancillary Services (system scheduling & balancing)

LGIA

- Large Generator Interconnection Application



Off-take

- Request for Proposals (RFP)
  - Regulated utilities are predominately moving towards the RFP process for procurement of generation
  - Can be renewable specific or all-source
  - Very competitive process
- Bi-lateral Deal
  - Option with non-regulated utilities
  - Relationship with utility is key
- PPA negotiations
  - Resource intensive ($$ and time)
- Capital Requirements
  - Short-list deposit ex. $3/kW
  - Development Security (Letter of Credit or Cash) ex. $15/kW
  - Operational Security (Letter of Credit or Cash) ex. 12 months expected revenue

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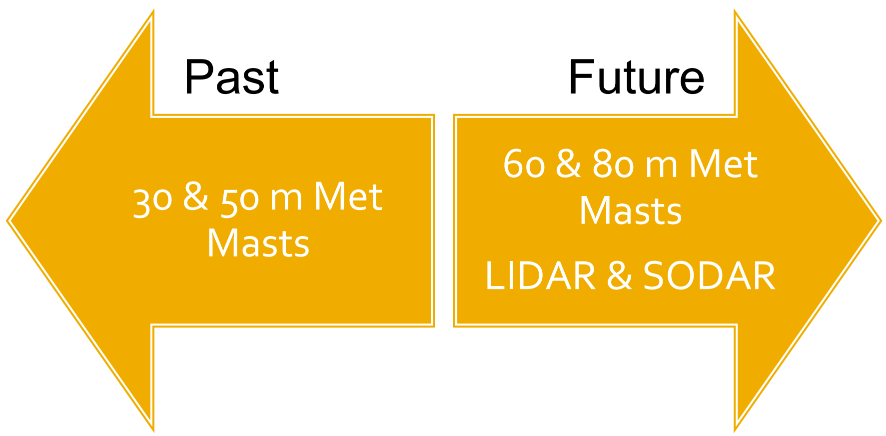
Resource

- Consistent wind > Strong gusts

  (at hub-height, 80 m+) (at ground level)
- Met Masts



(note: as of today, cannot finance a project solely based on SODAR or LIDAR data)

- Very important to ensure data quality & capture
  - Qualified 3rd party review of data required for financing

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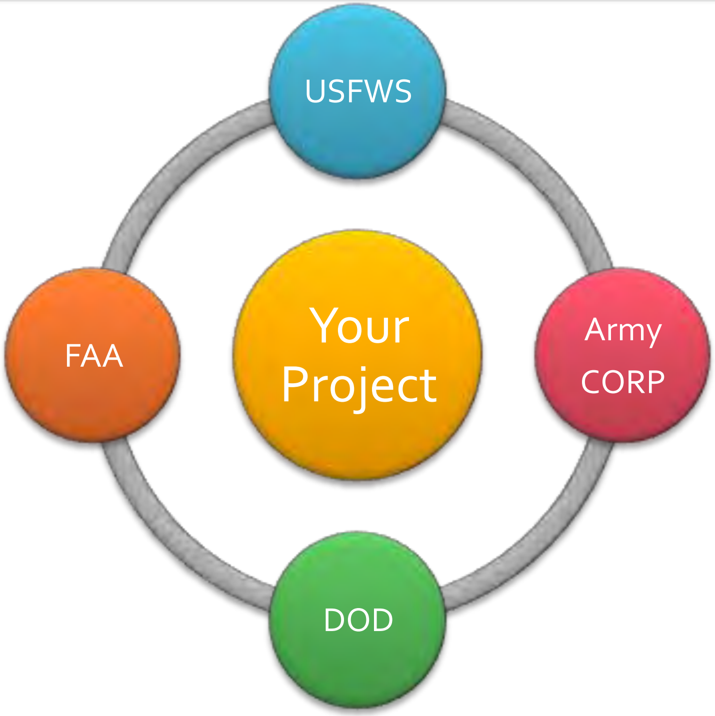
Permitting

- NEPA (EIS most likely)
  - BIA - Lead Agency
  - Coordinating Agencies



  - Cost Recovery Account
    - Upfront money required for agency to draw down
  - Timing of NEPA process will affect project schedule and COD

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EPC

- Engineering
  - Electrical
  - Civil
  - Geotechnical
- Procurement
  - Turbine/Panel Supply Agreements
  - Substation components
  - Misc: roads, foundations, cable…
- Construction
  - Road works
  - Transmission Infrastructure
  - Foundations
  - Erection

Turbines ~ 75% total capital cost
Panels ~ 50% total capital cost

Cost Estimations Critical for PPA estimates

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Community Outreach

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Be honest with Community on +/- of Power Plants


RES Americas' Moapa Solar Development BBQ (NV)

September 9, 2010

August 28, 2008

Community Outreach

SHARE INFORMATION!!!!

Express needs/wants

- Political
- Federal
- Regional
- State
- Local - county/reservation

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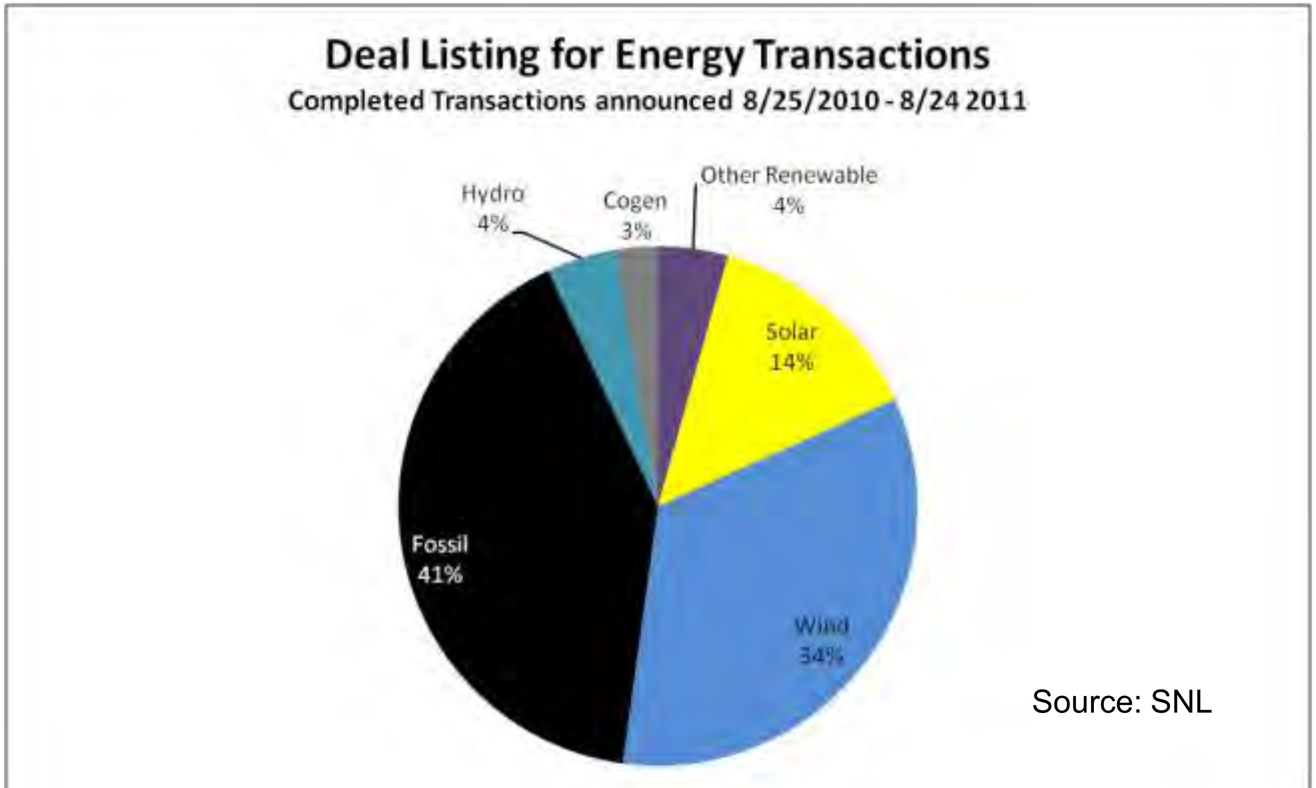
Financing

- Bank market still has desire to invest
  - But rates are more expensive with more restrictive terms
  - Bank market for loans still strong, but tax equity is harder



Financing

- Capital Requirements
  - Development
  - Construction
- Federal Incentives
  - PTC and ITC require tax appetite.
  - 1603 Cash Grant status and requirements

Tax credits uncertain, good for tribes?

Tribal ownership more competitive?

Review

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Questions?

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