

SOLAR MARKET BARRIERS; BREAKING DOWN THE WALLS

MIKE HEALY

GUARANTEED SAVINGS THROUGH GREEN ENERGY

THE PERMITTING PROCESS IS A SIGNIFICANT BARRIER TO SOLAR MARKET GROWTH



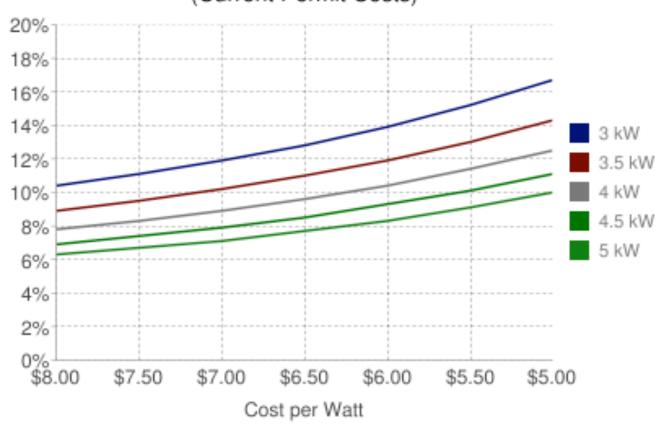
PERMITTING - WHAT'S THE PROBLEM?

- Cost
- Inefficiencies
- Nebulous & ambiguous process



NEGATIVE IMPACTS OF EXCESS PERMITTING COSTS

Percent of Residential Solar PV Project Cost From Permitting (Current Permit Costs)



- Local Permitting and inspection add \$0.50 per watt, or about \$2500 per residential install
- Permitting costs are equivalent to a \$1 billion tax on solar over the next 5 years

THE COSTS OF PERMITTING

Percent of Residential Solar PV Project Cost From Permitting



- Countries like Germany and Japan have streamlined permitting giving them a price advantage over the U.S.
- Germany has the lowest installed cost in the world, 40% lower than the U.S.,
 even though total incentives are expected to be lower in Germany in 2011.4

STREAMLINING PROCESS

- Fair, flat fees
- Over the counter issuance
- Standardize permit requirements throughout the region
- Make all material available online
- Allow online permit application submissions
- Remove excess reviews
- Reduce inspection appointment windows
- Train staff



BENEFITS TO JURISDICTIONS

- Save jurisdictions time and increase installations quality
- No need to reinvent the wheel and/or expend excess budget dollars
- Reduce re-submissions and failed inspection
- Reduce customization leading to less errors



Streamlining permitting processes does not sacrifice safety, but simply eliminates inefficiencies

4 NEXT STEPS TO STREAMLINING PERMITTING

- 1. Allow permitting applications to be submitted online
- 2. Reduce inspection appointment times
- 3. Form working group between industry stakeholders and government to specifically focus on streamlining permitting process
- 4. Make the permitting process completely transparent



CASE STUDIES

Germany

- Streamlined, and in some cases eliminated, the permitting process
- Germany has the lowest installed cost in the world, 40% lower than the U.S.,
 even though total incentives are expected to be lower in Germany in 2011
- Germany leads the world in installed solar capacity

Arizona

- High permitting costs were hindering solar development. City built strong coalition between council members and industry to tackle problem
- City streamlined, and expedited review process, and costs dropped as much as 80%

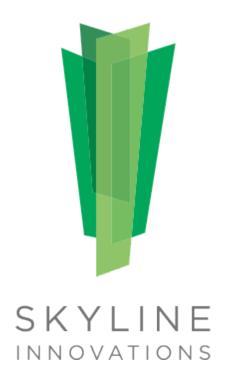
Colorado

- Likely a new national model for lowering solar fees, the Fair Permit Act (CO)
- Reduced inefficiencies in permitting process, capped fees at \$500 for residential and \$1000 for commercial projects, requires line-item costs for permitting agencies.
- Prevent local governments from exceeding costs caps

WHERE CAN I GET MORE INFORMATION?

- Solar American Board of Codes and Standards (Solar ABCs). http://www.solarabcs.org/
- Vote Solar. Permitting Best Practices. http://votesolar.org/best-practices/
- SunRun. The Impact of Local Permitting on the Cost of Solar Power.
 http://www.sunrunhome.com/cost-of-solar/solar-panels/local-permitting
- Solar America Cities.
 http://solaramericacommunities.energy.gov/





MIKE HEALY 202.306.7900 MHEALY@SKYLINEINNOVATIONS.COM

GUARANTEED SAVINGS THROUGH GREEN ENERGY

thank you.

THE COSTS OF PERMITTING EXPLAINED

- Complete permit applications: \$505
- Submit permit application in person: \$149
- Pay permit fee: \$431
- Variation in building requirements: \$726
- Field inspection: \$236
- Average delay: 3.5 weeks
- Reduce inspection appointment windows
- Sales and marking costs: \$845
- Untrained inspectors: \$350 (and time delay)