



Cost of Renewable Energy Spreadsheet Tool (CREST)

An Introduction & Primer

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Renewable Energy Cost Modeling

Project Objectives:

- Create a toolkit for cost-based rate-setting in the US
 - Report, Models, User Manual
- CREST models:
 - A cost-of-energy analysis tool intended to assist policy makers evaluating the appropriate payment rate for a cost-based renewable energy incentive policy.
 - Initial Phase = Solar CREST, Wind CREST (Complete)
 - Subsequent Phase = Geothermal CREST (Complete)
- CREST models (and Report and User Manuals) are publicly available at:

<http://financere.nrel.gov/finance/content/crest-model>



Project Team

- National Renewable Energy Laboratory (NREL)
 - Exeter Associates, Inc.
 - Sustainable Energy Advantage (SEA)
 - Meister Consultants Group (MCG)



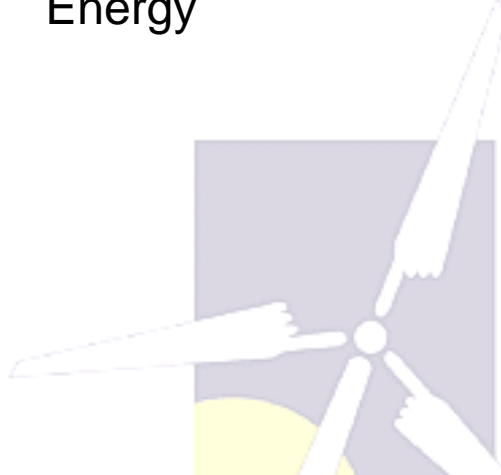
CREST Model

Key Assumptions: Cost-based, Fixed Payment, Long-Term

Balancing Priorities:

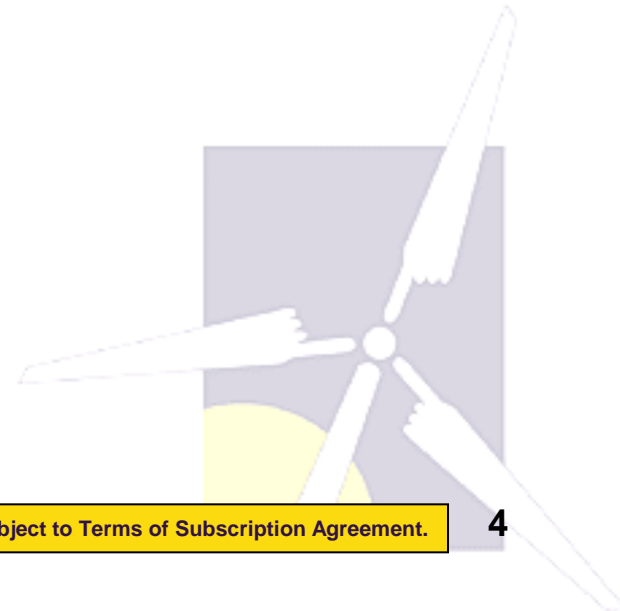
Ease of Use vs. Advanced Functionality

Automation vs. “No Macros”

<u>Inputs</u>	<u>Constraints</u>	<u>Outputs</u>
<ul style="list-style-type: none">• Size & Performance• Capital Costs• O&M Costs• Financing• Ownership/Tax• Incentives• Reserves• Depreciation	<ul style="list-style-type: none">• Debt Service Coverage Ratios<ul style="list-style-type: none">– Minimum– Average<u>Features</u><ul style="list-style-type: none">• Level of Cost Detail• Public/Private Ownership• Tax benefit carry-forward• Incentives	<ul style="list-style-type: none">• Cost of Energy• Levelized Cost of Energy 



MODEL INTRO & WALK-THROUGH...





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