The Virginia SolTax Model
A webinar for localities and utility-scale solar stakeholders

Hosted by Department of Mines, Minerals and Energy and UVA Weldon Cooper Center for Public Service

Feb. 17, 2021
Housekeeping Rules

• Please mute your mic
• Please use the Q&A box to ask your questions
• We will hold a moderated Q&A session at the end of the presentation
• Any unanswered questions will be answered by the team during the coming week.
Submit Questions in Q&A on Right Panel

Housekeeping/Navigation

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  - Video
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Raise Hand

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DMME
Virginia Department of Mines Minerals and Energy

THE VIRGINIA SOL TAX MODEL

ENERGY TRANSITION INITIATIVE UNIVERSITY OF VIRGINIA
Webinar Speakers

✓ Carrie Hearne, Dept. of Mines, Minerals and Energy
✓ Elizabeth Marshall, UVA Energy Transition Initiative
✓ Robert Crockett, Advantus Strategies
✓ Thomas Callen, University of Virginia
✓ Todd Flowers, Dominion Energy
Background

• Virginia’s solar landscape:
  • Clean energy option to help meet GHG emissions reduction goals
  • Increased market demand from buyers (especially corporate)
  • Rapidly falling costs in the solar market; economies of scale
  • Recent legislation and prioritization (GTSA, EO 43, VCEA, and more)

• DMME and UVA share the mission to provide technical assistance to localities:
  • Ensure clean energy goals can be met and reduce barriers to solar development while addressing emerging questions
The Virginia SolTax Model

• Developed in 2020 by UVA and DMME with input from broad stakeholder group

• Aimed to help localities make informed decisions in preparation for utility scale solar developments in their jurisdiction

• Uses publicly available yet highly complex tax and finance data (e.g. local M&T tax rates; SCC depreciation schedule)

• Creates user-friendly comparisons for local administrators and other interested parties to create scenarios, or download and include in public forums
Robert Crockett
Advantus Strategies and
Rural Solar Development Coalition

THE VIRGINIA
SOL TAX MODEL
DISCLAIMER

• The Virginia SolTax Model does not constitute legal advice.

• Not intended to demonstrate the complete long-term economic impact that solar development may contribute to a locality.

• The SolTax Model is one reference tool to use when determining which tax regime a locality could apply for utility scale solar projects, or other solar related decisions.

• An ordinance must be passed to apply the revenue share option.
Local Options for Taxation and Revenue (Utility Scale Solar)

1. **Conventional, default option:**
   a. Local Machinery & Tools tax for 25 MW and less, or
   b. Real Estate tax rate for projects over 25 MW using SCC Depreciation schedule

   *Note: M&T updated in 2020 (HB1434/ SB763) to include step-down schedule:*
   - 80% the first 5 years
   - 70% the second 5 years
   - 60% all remaining years in service

   Extends sunset date to July 1, 2030

   *or*

2. **New alternative to apply a “revenue share” (energy tax) via local ordinance**
   a. Assess up to $1,400 per MW of nameplate capacity per year (HB1131/ SB762, 2020)
M&T/ Real Estate Rate

58.1-3660

- Tax calculated based on assessed value, which includes several parameters:
  - The notional dollar value of the initial capital investment made by project developers.
  - The schedule of exemptions that apply specifically to utility-scale solar projects per § 58.1-3660 of state law.
  - The depreciation schedule applied to capital investments, whether applied by the State Corporation Commission (SCC) or the locality (whichever is applicable).
  - The size of the solar project in MW.
  - The local M&T tax rate and real estate rate, which may vary by locality.

- Further, the tax rate, depreciation schedule, and exemption rate depend on the size of the project and who is operating it.

- Indirect effect on state’s per-pupil contribution based on impacts to the Composite Index of Local Ability to Pay (CI).
Revenue Share Ordinance
58.1-2636 and 58.1-3660

• Must be adopted by local energy revenue share ordinance

• Applies to projects filed with the locality on or after July 1, 2020: not retroactive but there are some exceptions

• Allows locality to assess up to $1400* per MW of nameplate capacity per year for projects larger than 5 MW

• Also has indirect effect on state’s per-pupil contribution based on impacts to the Composite Index of Local Ability to Pay (CI)
Development Approach

- DMME and UVA, together with stakeholders created the “SolTax” analysis tool where localities run customized, hypothetical scenarios to inform decision making.
- Policy- and research-based, stakeholder-informed, beta-tested.
- Link to SolTax is on Energy Transition Initiative’s website, or at:
  - https://solar-tax-webapp.herokuapp.com/
Virginia SolTax Model
Live Demonstration

Thomas Callen
SolTax Lead Developer
Student, UVA
tpc3yw@virginia.edu
Evaluating The Options: The Virginia SolTax Model

- Create a user profile that automatically imports locality tax information (one locality per profile)
- Customizable parameters
- Create project scenarios and a portfolio of projects
- Compare expected lifetime M&T/Real Estate Tax revenues to Revenue Share revenues
- Lineplot of a year-by-year nominal cashflows
Virginia SolTax Model Account Setup

• On the home page, select “Create New Account” from navigation bar.
• Fill out Sign Up form with an Username, Email, and Password.
• Select a locality to set your profile parameters. These parameters include:
  • M&T and Real Estate Tax Rates
  • Assessment Ratio
  • Local Depreciation Schedule
• Click “Continue”
• Your account is setup, click “Generate New Project Analysis” to use tool.
What’s next?
Potential Impacts of Proposed Legislation

2021 General Assembly may bring additional changes

- House Bill No. 2269
  - Proposed by the House Committee on Finance 1/27/2021
  - Patron Prior to Substitute – Delegate Heretick (79th District)
  - Applicable to counties that elect Revenue Share (by ordinance)
  - Key Changes:
    1. Adds energy storage systems to the Revenue Share Provisions
    2. Adds a provision that increases revenue over time:
       - Maximum amount of the revenue share may be increased on 7/1/2026 and every 5 years thereafter by 10%
       - Not applicable to projects approved by a locality prior to January 1, 2021

2/1/2021: House: VOTE: Passage (91-Y 8-N)
2/15/2021: Senate: Re-referred from Commerce and Labor (14-Y 0-N)
2/15/2021: Senate: Re-referred to Finance and Appropriations
SolTax Model Updates

- In the process of collecting updated real estate tax rate and assessment ratio data and updating for all localities (currently using 2019 data)
- 2021 legislation – monitoring potential changes
- Responding to user inquiries and feedback (via tool’s comment function):
  - Please feel free to propose UX and feature upgrades; for example:
  - Exporting results into Excel
Questions?

The Virginia Solar Tax Model
Coming Soon: Statewide Solar Survey

with input from the following organizations:

The Nature Conservancy
SOL Unesco
Virginia Association of Counties
MDV-SEIA
DEQ
Contacts

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SolSmart Technical Assistance (see appendix)

- SolSmart is a national designation program to recognize localities for encouraging solar energy growth.
- DMME & UVA offering no-cost technical assistance to localities
- Recent designations include the Williamsburg (Silver) Pulaski County (Gold), New River Valley RC (Bronze) & eight Coalfield localities (Bronze)
- LOCALITIES may request a consultation [https://dmme.virginia.gov/de/SolSmart.shtml](https://dmme.virginia.gov/de/SolSmart.shtml)

Eight SW Virginia communities receive SolSmart designation (2019)

Photo credit: Chelsea Barnes, Appalachian Voices
Siting Agreements, Broadband and Solar

• HB 1675 (2020) gives localities more power to realize community benefits via negotiating Siting Agreements for projects in Qualified Opportunity Zones (QOZs) and OZ-eligible locations.

• This new policy enables localities to negotiate specific terms such as Broadband investment, enabling the locality to meet their match for state grants, for example. See SW Solar Playbook for details.

• Read more in SoVaNow.com or connect with Robert Crockett of Advantus Strategies who represents counties in the Rural Solar Dev. Coalition.
Solar Playbook for Large Scale Solar (SW VA)

• The Solar Workgroup, the Solar Foundation and DMME created an introductory guide for local governments to facilitate large-scale solar projects in SW Virginia.

• In a region with a long history of energy production, solar technology offers enormous potential for economic development and job growth.

• The playbook is directed to municipal and county governments that have an essential role to play in encouraging large-scale solar projects.

• The playbook is part of an effort to bring solar energy and associated jobs to the Coalfield region.

swvasolar.org/swva-solar-playbook

Clean Energy Virginia
Virginia Clean Economy Act

- Establishes a mandatory renewable portfolio standard (RPS):
  - Dominion Energy: 40% by 2030; 100% by 2045
  - Appalachian Power: 30% by 2030; 100% by 2050

- Establishes a mandatory energy efficiency resource standard (EERS):
  - Dominion Energy: 5% by 2025
  - Appalachian Power: 2% by 2025

- Deems 16,100 MW of solar and onshore wind, 5,200 MW of offshore wind, and 2,700 MW of energy storage in the public interest.
State Energy Goals: Executive Order 43

30% by 2030
Produce 30 percent of Virginia’s electricity from renewable energy sources by 2030

100% by 2050
Produce 100 percent of Virginia’s electricity from carbon-free sources by 2050

Energy Equity
Achieve energy goals in a just manner that advance social, energy, and environmental equity

Clean Energy Virginia