

## **Update on Committee Activities**

**September 26, 2019**

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# Renewable Energy and Sustainability Advisory Committee (RESAC)

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## TODAY'S UPDATE:

- Membership
- Original Charge
- Accomplishments
- Current Efforts
- Future Priorities

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# Renewable Energy and Sustainability Advisory Committee (RESAC)

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- Heather Abbott, Chair
- Toby Ahrens, Vice Chair
- David Ertz
- Scott Sheriff
- Chuck Parker
- David Craig
- Kurt Adams
- Mike Sears
- April Humphrey - Town Council Liaison

# Original Charge

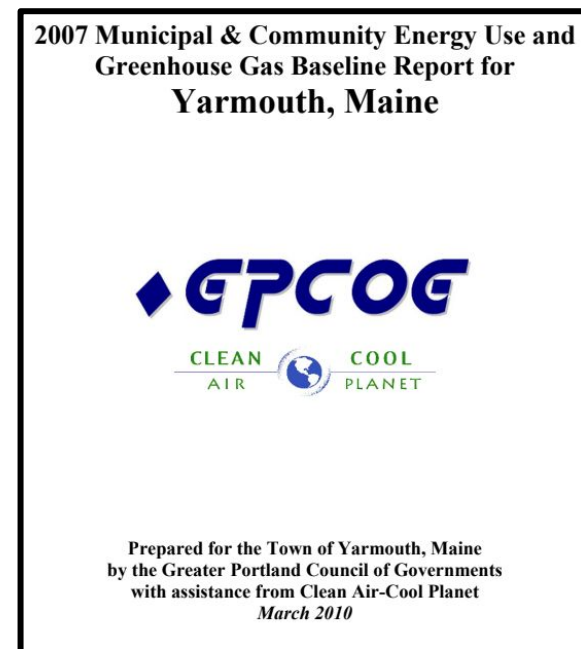
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**Be it further Resolved** that the Yarmouth Town Council requests the RES Committee 1) to discuss, organize and implement one or more educational workshops or forums aimed at informing residents regarding affordable renewable energy options, 2) reach out to nearby communities to learn about, and if possible, facilitate mutual projects relating to renewable energy projects for residents, 3) propose additional programs that would make energy efficiency and renewable energy options accessible to a wider range of residents, and 4) take direction from the Yarmouth Town Council and report back to the Yarmouth Town Council upon request, but in any event, at least once every six months.

# Efforts to Date

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- Establish our baseline and relationships
  - Previous efforts in Yarmouth
    - Yarmouth Energy Savers (Marge Titcomb, Alison Truesdale)
    - Yarmouth Water District (Bob MacKinnon)
  - Neighboring towns
    - Falmouth (Kimberly Darling)
    - Cumberland (Denny Gallaudet)
    - GPCOG



# Conclusions

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- We have great foundation on which to build
- Neighboring towns are ahead of us, have more committed resources, appear willing to help but not wait for us
- We can't do everything; need to prioritize



# Community Outreach and Education

- Flyer printed and distributed
  - Online version includes hyperlinks for additional information
- Town Newsletter
- Yarmouth Chamber of Commerce
- Events:
  - January 2019: Energy Fair Co-Sponsor
  - October 2019: Documentary showing followed by Q&A
  - November 2019: Energy efficiency info night, Heat pumps, Window Dressers





# Efforts to Date: Additional Priorities

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- 2007 Yarmouth Greenhouse Gas Baseline report
  - Residential energy use is biggest GHG contributor in Town. Publicize/educate on benefits of weatherization, installation of programmable thermostats, and heating system upgrades such as heat pumps.
  - Biggest municipal energy users were schools and Town Hall. We are involved in the bond-funded building improvements.
- Weatherization: Window Dressers program
- Renewable energy:
  - Federal solar incentives are being phased out, so we should make this a short-term priority
  - Educating community and businesses on grant opportunities/ incentives:
    - EV charging stations: VW Settlement and other incentives



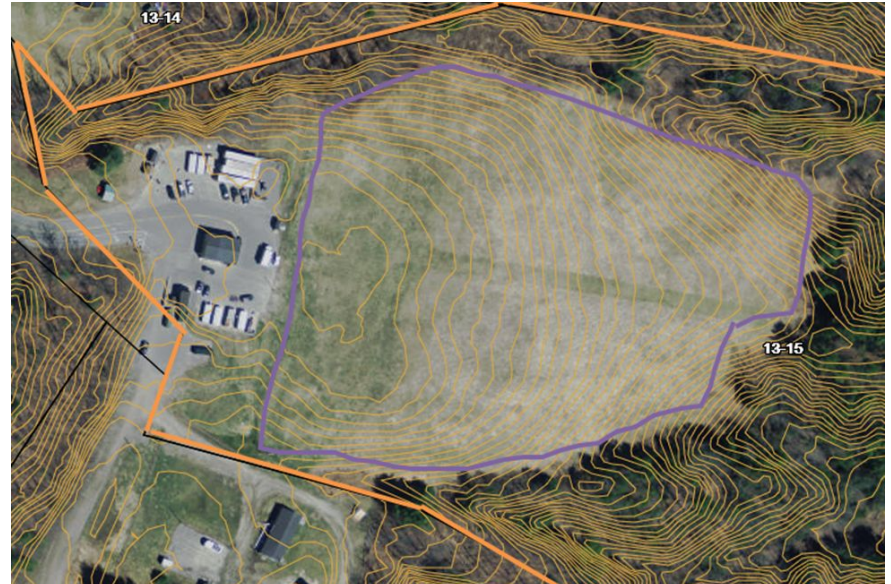
# Proposed Solar Project for Yarmouth

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- Estimated Project Size
  - Town: 1.15 MWdc producing 1.495 million kWh/yr
    - 3,120 panels
    - Land Requirements: Array - 6 acres plus cleared land to eliminate shading
  - Schools: 1.46 MWdc producing 1.898 million kWh/yr
    - 3,940 panels
    - Land Requirements: Array - 8 acres plus cleared land to eliminate shading
- Current Candidate Sites – Town-owned
  - Capped municipal landfill at Transfer Station
  - Sligo Road parcel adjacent to Yarmouth Water District
- CMP Pole Yard (Sligo Road)
  - Town has option to purchase site
  - Revisiting liability transfer issues with CMP

# Capped Town Landfill

- Capped in 1984
- Clay Soil Cap –18 inches
- Access through Town's Transfer Station
- Total Area: 4.5 Acres
- Site Characteristics
  - Existing (cleared) site with no other potential uses
  - No floodplain issues
  - Zoning: RR suitable use
  - Upgrade to 3-Phase power along East Main St.- 0.5 mi
  - Steep slopes to the south
- Capacity – 550 kW
- Annual Generation: 50% of Town facilities load



# Sligo Road Site

- Access Sligo Road/YWD
- Adjacent to CMP Pole Yard
- Total Area: 34.35 Acres
  - Area available to support solar array reduced by Shoreland District/Flood Hazard Area
  - Capacity: 1.9 MW
  - Annual Generation: 2.3MM kwh (55% of total Town load)
- Other Considerations
  - Upgrade to 3-Phase ~0.5 miles from the West Main St.
  - Zoning: RR – suitable use
  - Ledge: Unknown
  - Wetlands: Unknown





# Financial Considerations

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- Power Purchase Agreement

- Execute EPC Contract
- Investor to Capitalize Project
- Execute a 25-year PPA
- Lease town land for \$1
- Tax credits to investor



- Operations and Maintenance

- O&M agreement between investor and contractor
- No additional cost to Town

- Buy-out Option

- Can be exercised at milestones
  - Starting at Year 7
  - Intervals of 5 starting at Year 10
  - At Year 26 - FMV



# Municipal Solar: Moving Forward

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- Town Council indicated interest in RESAC continuing to pursue options (May 2019)
- RESAC recommends targeting a start of construction in 2020 to be eligible for 26% Federal Tax Credit (decreases to 22% in 2021)
- Next steps:
  - Reach out to CMP to re-open the discussion of Town acquiring pole yard
  - Refine the layouts for Capped Landfill and Sligo Road sites and secure preliminary cost estimates
  - Prepare first-pass estimates for the upgrading to 3-Phase power including all utilities for the 2 sites
  - Fund a Phase 1 Environmental Site Assessment to research past uses of the Sligo Road site and eliminate any concerns with regard to contamination and that element of risk – should be considered by the Town Council after we have a better understanding of the viability of the pole yard – Phase 1 ESA cost estimate
  - Adopt a strategy for a RFP turnkey solar installers regarding timing and pending risks
  - Implement Request for Proposals (RFP) strategy

# Final Thoughts

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- Good relationships established with neighboring towns
- We are engaged in planning for the bond-funded building upgrades
- Progress on public engagement
  - Flyer and online resources
  - Participated in Energy Fair, have planned public events
- Progress on municipal solar
- Additional resources would be a huge support
  - Moving forward, public events and efforts such as municipal solar feasibility could greatly benefit from support of a staff member.



# If we had additional resources...

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- Public events
  - Space availability
  - Advertising
  - General facilitation
  
- Municipal solar feasibility
  - Reach out to neighboring communities
  - Facilitate contracting for pre-design studies, as necessary
  - Guide the RFP process and preparations
  
- Other general support
  - Meeting continuity and ensuring progress



# Thank you for your time!

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On behalf of RESAC, we thank you for your time this evening. Our team looks forward to working together with the Town Council to see progress in this important area for the Town of Yarmouth!

