



WALL RATINGS EXPANSION CONCEPT



Annual Membership Meeting
Sacramento, CA
May 18, 2018

- Background
- Topic History
- Questions and Answers
- Revenue and Cost Estimates
- Next Steps





CONTEXT

- “CWE” (Cool Walls Expansion) is the shorthand we’re using to describe the CRRC’s expansion into rating wall products
- Using a similar approach to roof ratings, CRRC would rate any wall product, not limited to just high albedo models



PROGRAM BENEFITS

- No current rating program for walls
- Similarity in rating methods and experience make CRRC an ideal candidate
- Energy and environmental benefits appear to be similar to roofs
- Cool wall credits to be considered for programs and codes (e.g. LEED, CA Title 24)



HISTORY

- 2009 and 2014 CRRC Strategic Plans identify rating other surfaces, and specifically mention walls as an area of interest
- LBNL project studying potential impact (funded by California Energy Commission)
- CRRC Cool Walls Working Group (convened 2018)



CRRRC COOL WALLS WORKING GROUP

Members:

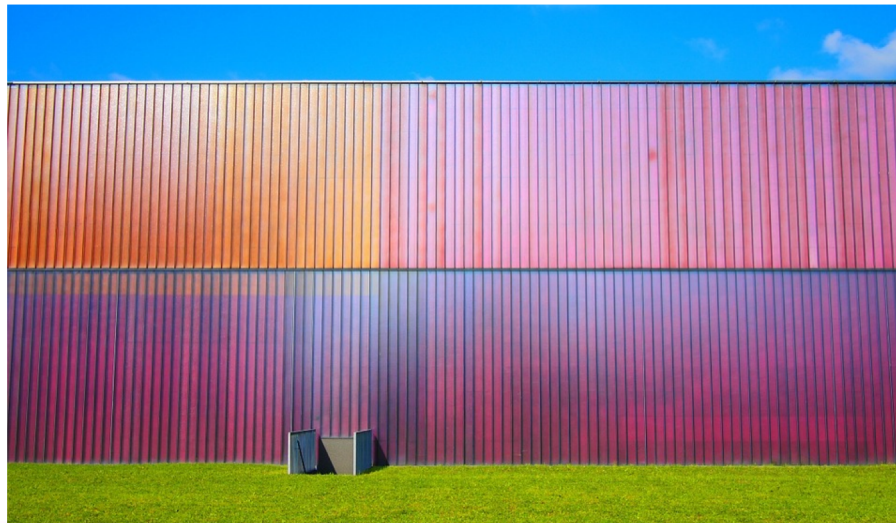
- Peter Turnbull (Chair)
- Ronnen Levinson
- George Daisey
- Kurt Shickman
- Andre Desjarlais
- Ted Best
- Jeff Steuben (staff)





COOL WALLS WORKING GROUP (continued)

- Met in early 2018 to explore CWE
- Met with cool wall industry representatives to collect feedback, answer questions, and gauge interest





QUESTIONS AND ANSWERS



What is the financial impact of CWE on roof manufacturers?

- Growth of CRRC by adding new Licensees, Members, and Products allows the organization to keep costs fixed for current participants





Is the CRRC using roofing fees to fund CWE?

- The CRRC may use its funding reserves to cover upfront costs associated with CWE
- CRRC funding used for CWE are only “loaned” to the wall sector; ultimately the wall sector program must be cost-neutral
- CRRC will also explore obtaining seed funding to help cover upfront costs



Will CWE negatively affect CRRC services?

Key part of CWE is to hire an additional CRRC staff member to focus on CWE (e.g. outreach to industry and end-users) and ensure other staff have more capacity for both cool roofs and cool walls





How might CWE affect perception of cool roofs?

- Addition of walls allows CRRC to discuss the benefits of the entire building envelope and how both walls and roofs improve building energy efficiency and help mitigate the urban heat island effect
- This should bring greater attention back to roofing as part of whole building envelope equation



How will wall interests be integrated into CRRC?

- Form a standing committee dedicated to reviewing questions or issues associated with wall products
 - The committee escalates topics to the Technical Committee or Board, as appropriate
 - Committee chair has non-voting role on Board
- Consider expanding the number of positions on the Board of Directors to include walls



REVENUE AND COST ESTIMATES

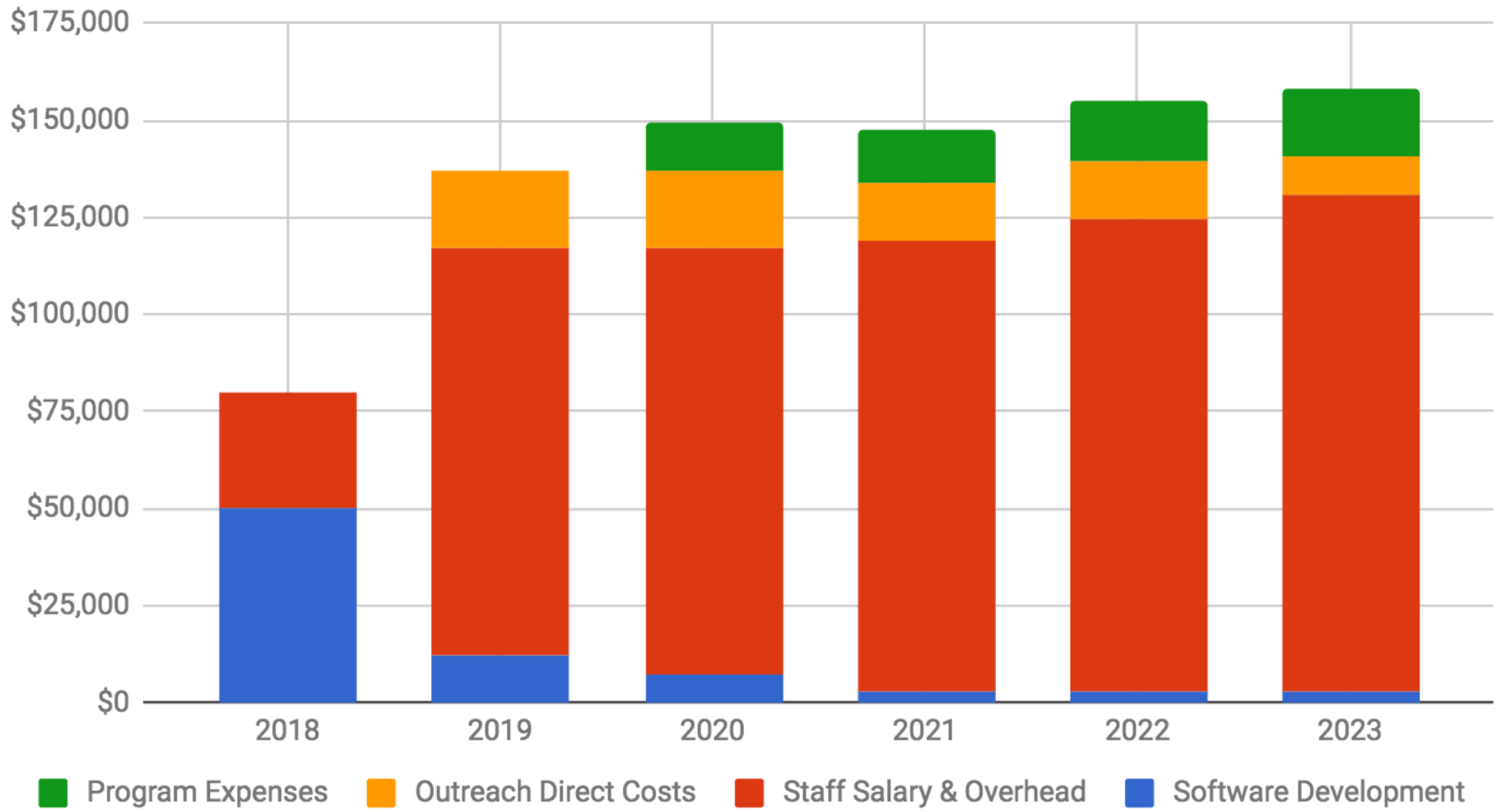
Two break-even scenarios



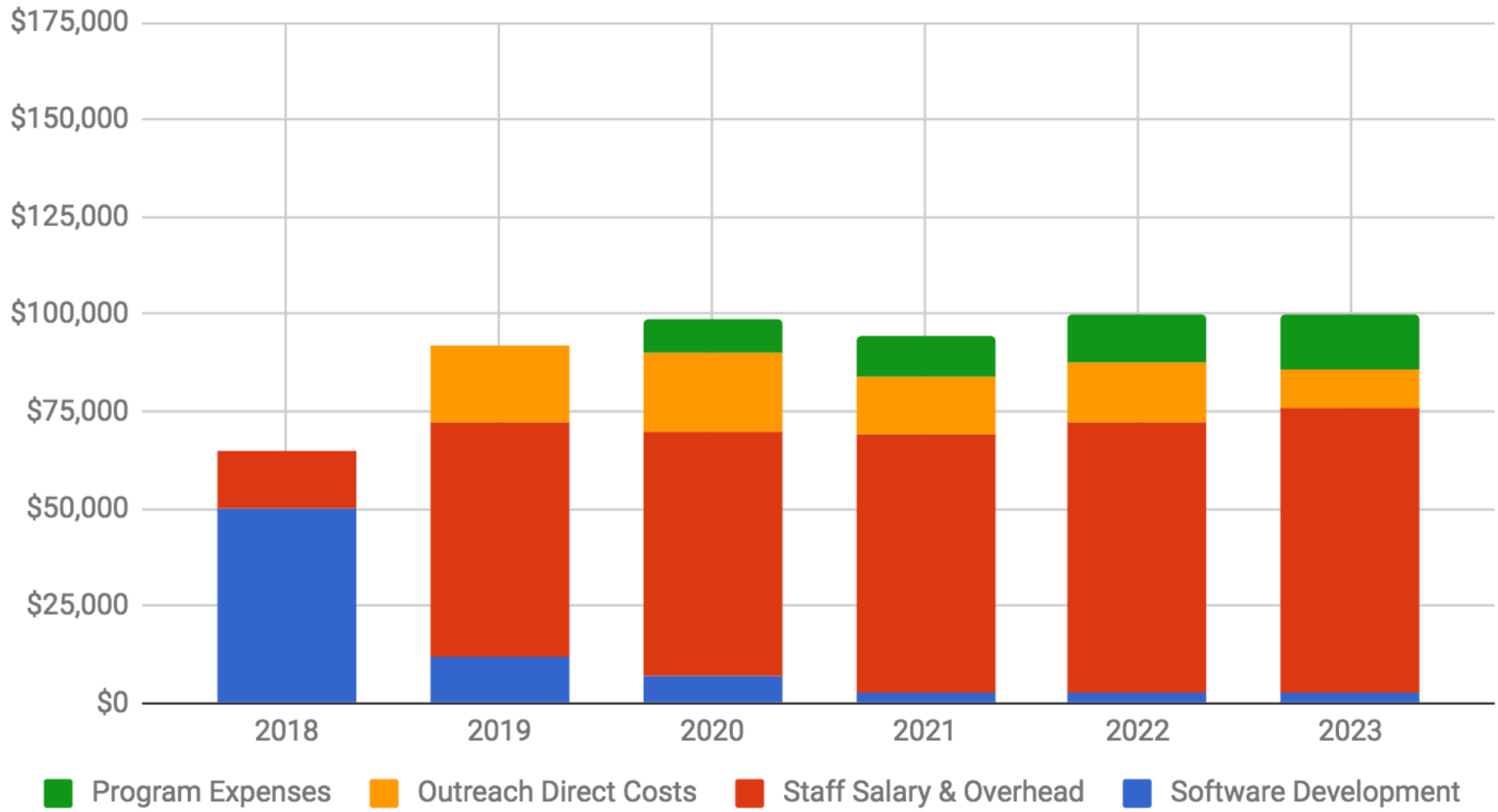
COSTS

- Upfront and fixed costs
 - Software development (updates to Portal to accommodate wall ratings)
 - Outreach direct expenses
 - Program Expenses (i.e. Random Testing)
- Staffing and overhead
 - 1 FTE scenario
 - ½ FTE scenario

Cost Breakdown (1 FTE)



Cost Breakdown (1/2 FTE)





1 FTE: REVENUE

Assume in 2019:

- 35 New Licensees (~200 currently)
- 24 New Members (~200 currently)
- 175 New Product Ratings (~3,000 currently)

Slow, steady linear growth after 2019

- 5 additional Licensees per year
- 4 to 5 additional Members per year
- 25 additional Products per year



1/2 FTE: REVENUE

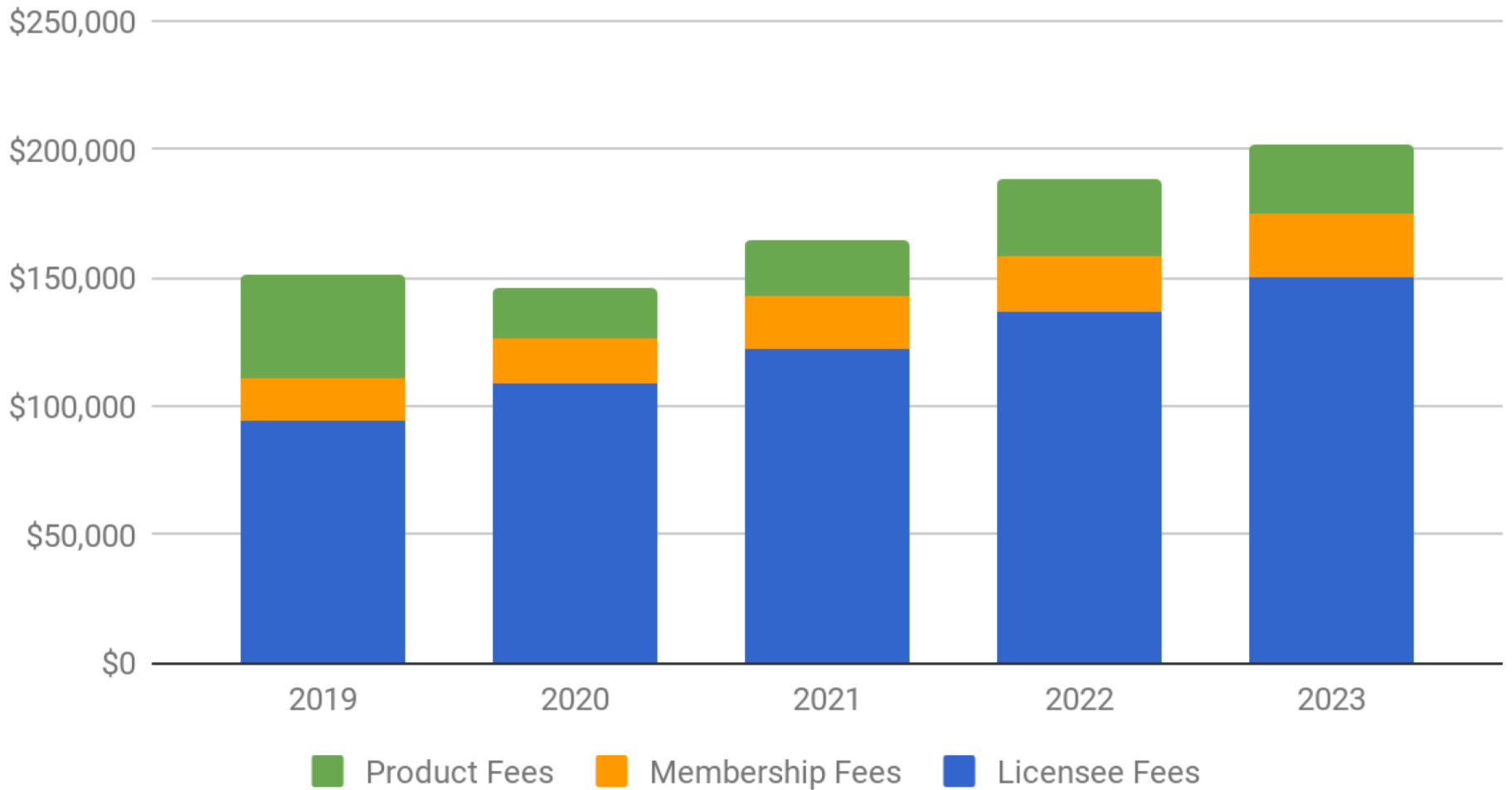
Assume in 2019:

- 18 New Licensees
- 15 New Members
- 120 New Product Ratings

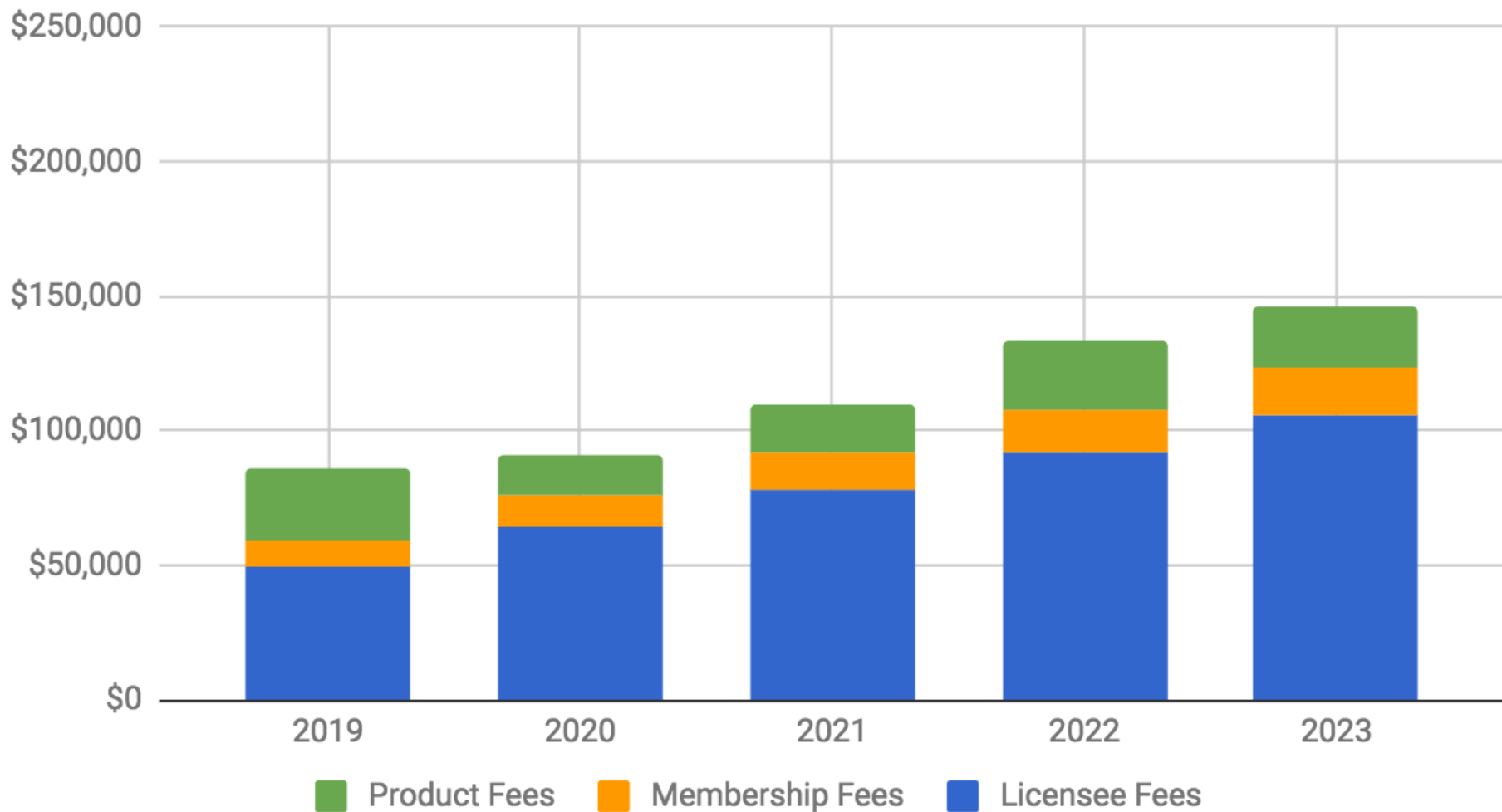
Slow, steady linear growth after 2019

- 5 additional Licensees per year
- 4 to 5 additional Members per year
- 25 additional Products per year

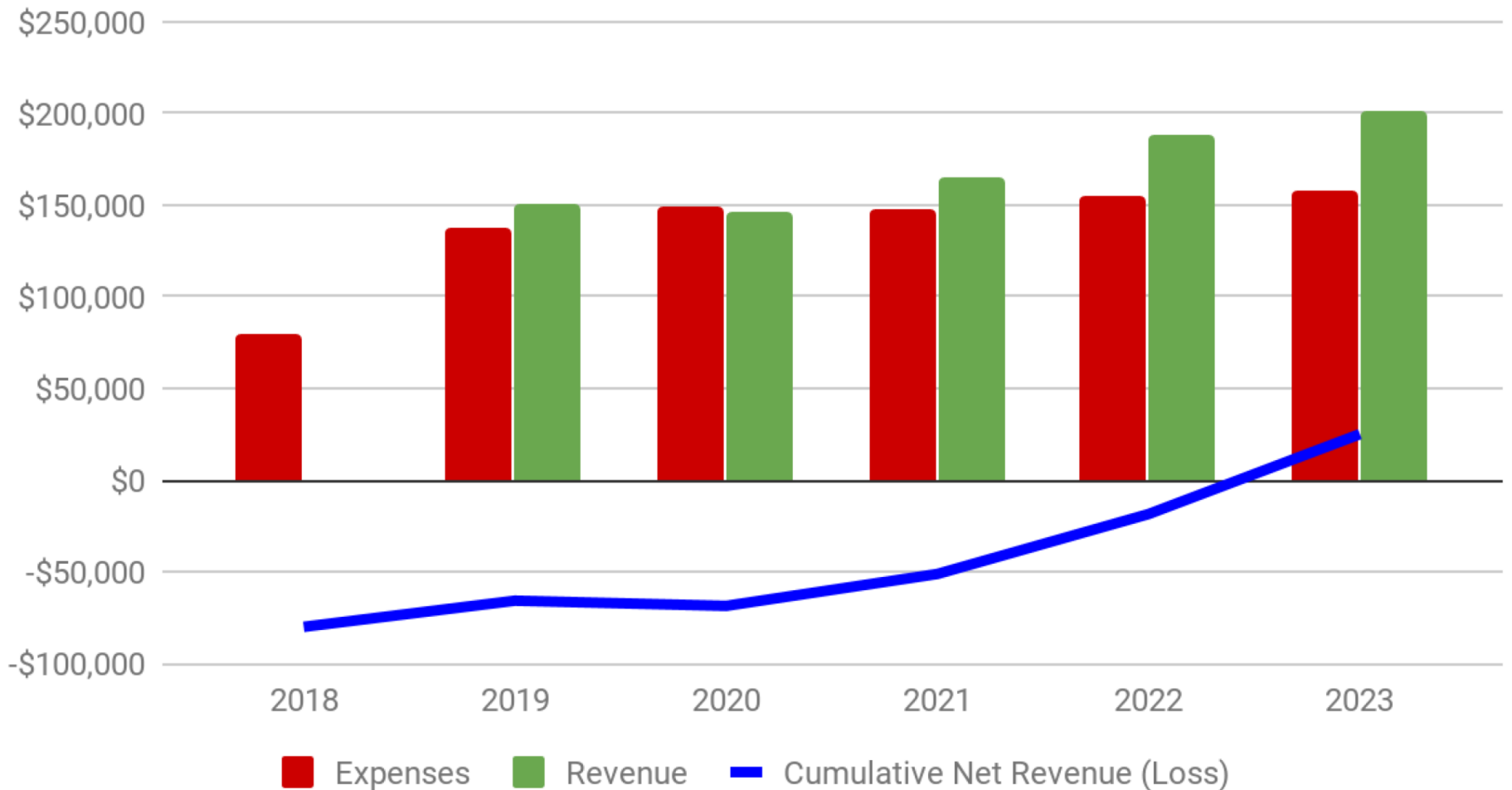
1FTE: Revenue Breakdown



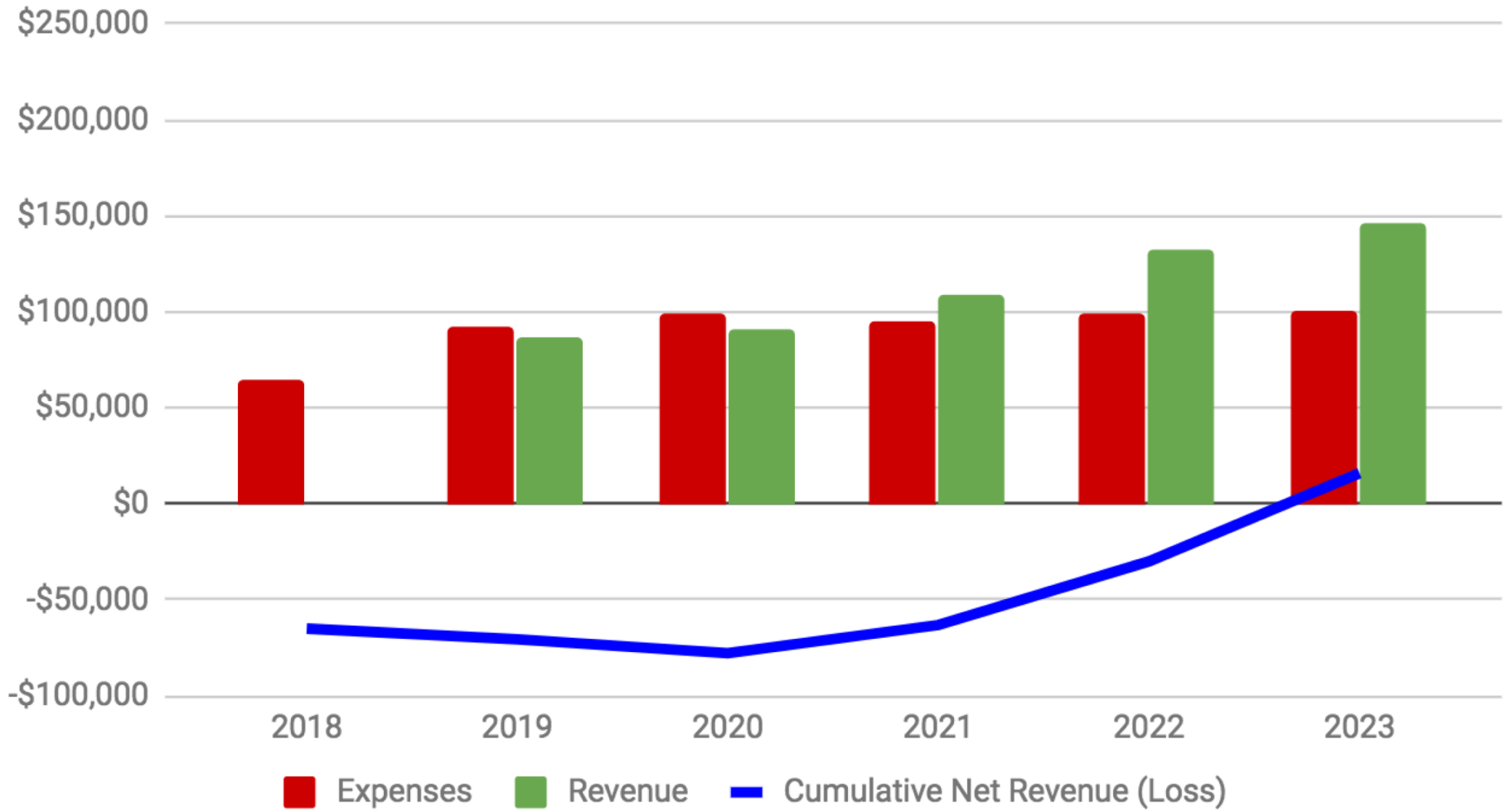
1/2 FTE: Revenue Breakdown



1 FTE Break Even - Expenses, Revenue, and Cumulative Net



1/2 FTE Break Even - Expenses, Revenue, and Cumulative Net





GO / NO GO

- Seed funding (e.g. ~\$100,000) helps defray upfront investment needed to get program off the ground
 - CA Energy Commission
 - California Utilities
 - DOE
 - Other environmental foundation?
- Need expressed interest in wall program for break-even scenario to move forward



NEXT STEPS

- Questions from the audience?
- Gauge industry interest; get commitments
- Interface with CA Energy Commission and other end-users to understand if wall provisions will be going into effect
- Continue CRRC document and policy review with Board and legal counsel



QUESTIONS?