



Maximizing the Financial Opportunity of the New ERA Program

June 12, 2023



WHO WE ARE

RMI is an independent, non-partisan, global nonprofit organization of 600+ experts across disciplines working to accelerate the clean energy transition and improve lives.

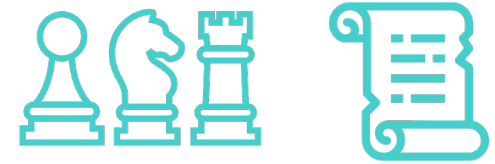
OUR MISSION: Transforming the global energy system to secure a clean, prosperous, zero-carbon future for all.



Founded and headquartered in Colorado, RMI has a long history of working with legislators, state agencies, regulators, utilities, municipalities, and other stakeholders.

Day 1

Maximizing the Financial Opportunity of the New ERA Program



Day 2

Defining an Ambitious and Affordable New ERA Plan



Today's Speakers



Ali Rotatori
Manager
arotatori@rmi.org



Sam Mardell
Manager
smardell@rmi.org



Uday Varadarajan
Senior Principal
uvaradarajan@rmi.org



Christian Fong
Senior Associate
cfong@rmi.org

The Federal government is the final source of information on use of IRA programs

- **New ERA: RUS will continue posting clarifications and guidance**
- **Tax Credits: Treasury expects to post guidance soon**

Information in the presentation is current as of June 12, 2023

Agenda

1 How New ERA creates financially resilient utilities

2 Rules of the game – understanding credit subsidy

3 Q&A Part 1

4 Qualitative logic for selecting a New ERA award

5 Playing the game – maximizing New ERA benefits

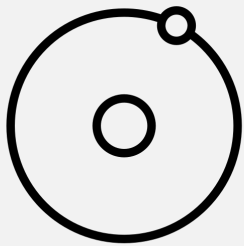
6 Q&A Part 2



Key changes with IRA:



Modifications to the PTC and ITC that allow co-ops to monetize tax credits



New ERA can provide equity infusions and subsidized debt

Co-ops and New ERA: Opportunities, Challenges, and Solutions

Co-Ops can use New ERA to chart a financially sound and clean future



- New ERA and direct pay tax credits help co-ops to invest in commercially proven technologies with as much equity as possible
- By the end of the decade: **a healthy balance sheet for future investments** in a reliable and affordable electric system for members

Co-ops must make complex decisions with near-term deadlines



- Many decisions are required to define a feasible resource plan and associated funding request
- Letters of Intent (LOIs) are **due by the end of August**

Co-ops can maximize this opportunity with an effective funding request



- New ERA applicants must determine a combination of grants and subsidized loans that **delivers the proposed physical resource portfolio while creating the greatest value for members**

Before the IRA, clean energy incentives didn't really work for rural electric cooperatives and their members – now they do



Equity Challenge

Owned storage + RE is capital intensive, and highly leveraged co-ops did not have ability to raise debt without risking credit downgrades

Direct pay tax credits and New ERA provide new sources of equity that co-ops can leverage



Ownership Challenge

Co-ops did not have the ability to own clean assets while utilizing tax credits, forcing co-ops to use third-party PPAs

Direct pay tax credits allow co-ops to pass on full benefits to customers while owning assets



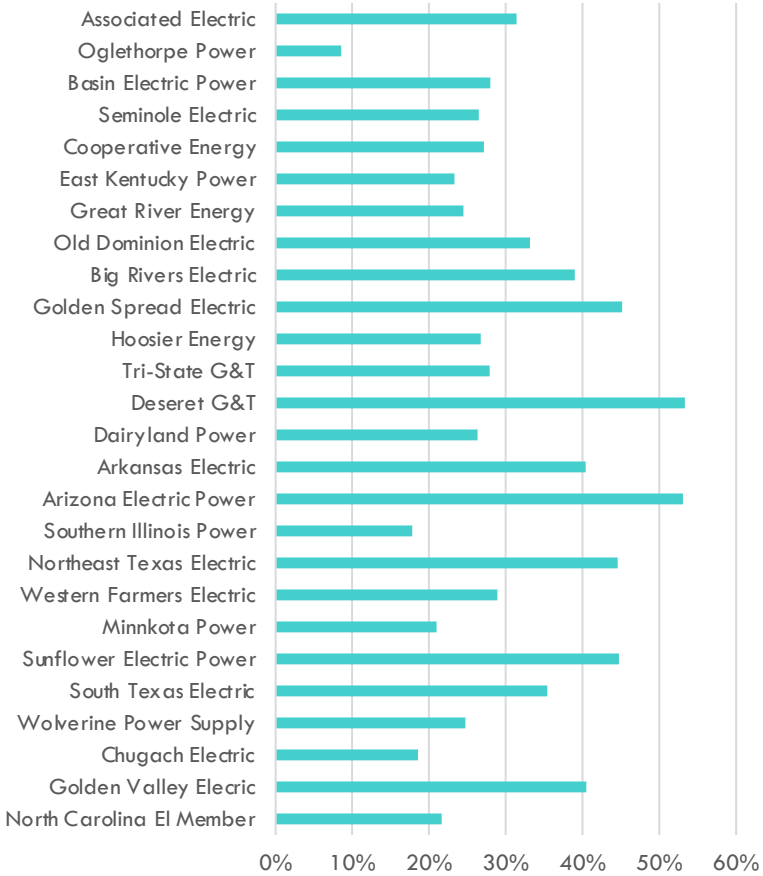
Stranded Asset Challenge

Fossil capital costs do not go away with clean deployment

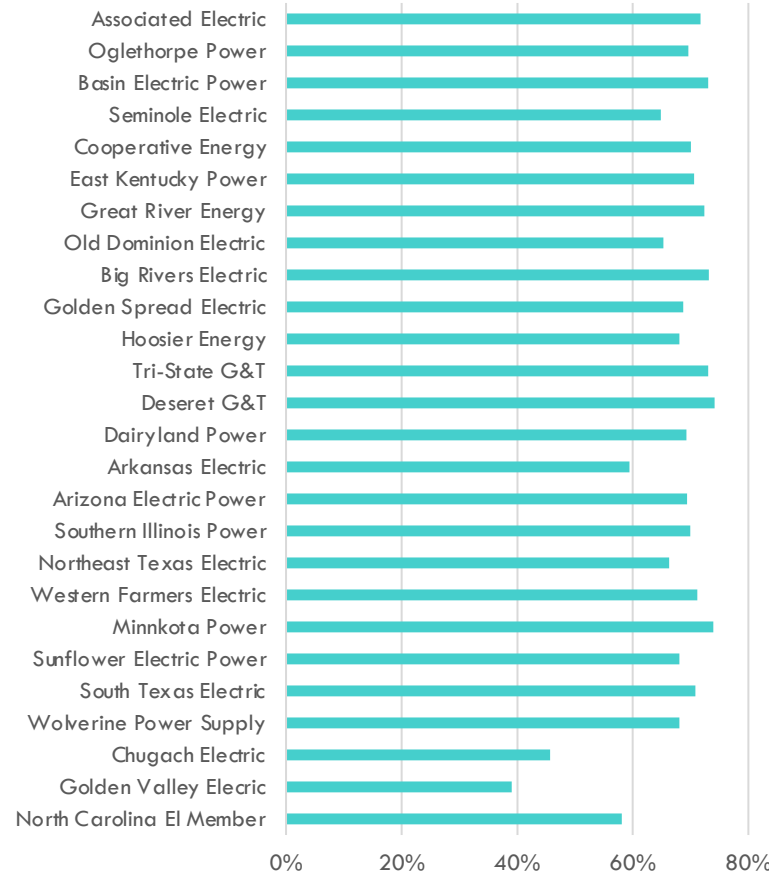
New ERA can refinance stranded assets with zero-interest or low-interest debt

Cooperative financial positions previously hindered the realization of clean energy potential

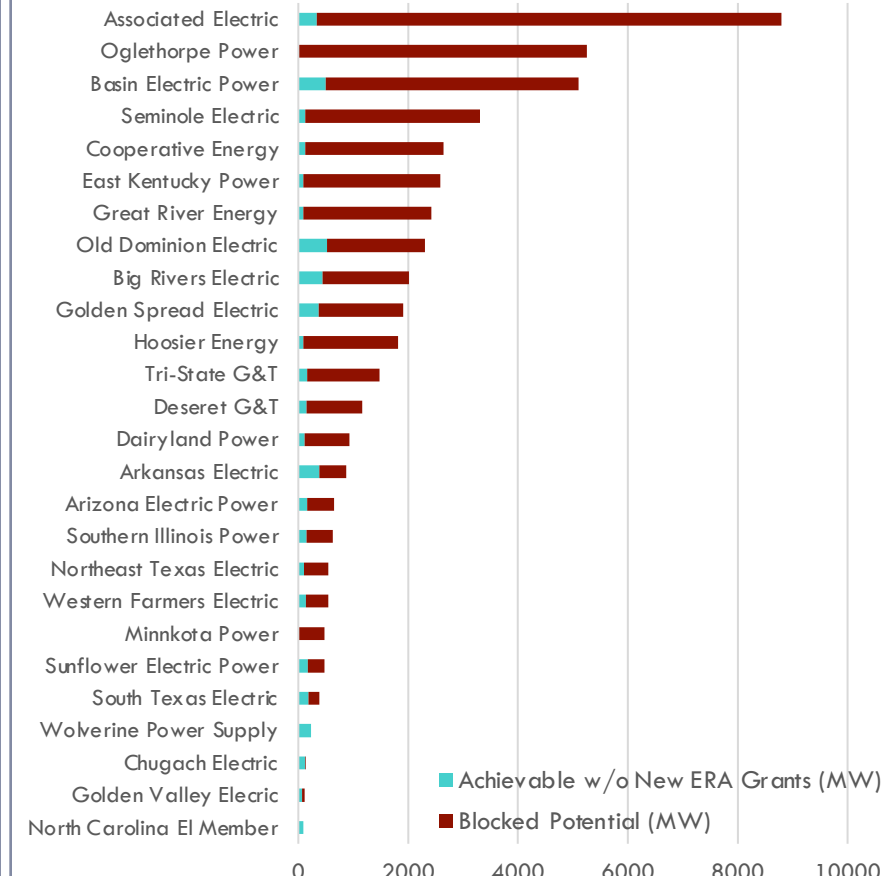
COOPERATIVE EQUITY RATIOS



ACHIEVABLE DECARBONIZED CAPACITY



RENEWABLE POTENTIAL WITH/WITHOUT NEW ERA



New ERA creates new possibilities for coordination between G&Ts and distribution co-ops

Three application buckets that ensure larger G&Ts will not compete against smaller distribution co-ops

Flexibility for financing and for defining a package of eligible investments

Benefits to coordinating large supply-side investments with investments in demand-side flexibility

Agenda

- 1 How New ERA creates financially resilient utilities*
- 2 Rules of the game – understanding credit subsidy**
- 3 Q&A Part 1*
- 4 Qualitative logic for selecting a New ERA award*
- 5 Playing the game – maximizing New ERA benefits*
- 6 Q&A Part 2*



New ERA Award Structure

What is the structure of the disbursement?

- Awards can consist of grants, loans, or a combination of the two

How much money can co-ops receive?

- Each entity can receive up to 10% of the New ERA appropriation — for a max of \$970 million
- How much financing this translates to depends on the type of support (grants vs. loans) as well as the "costs" of these loans (credit subsidy)

How do the grants work?

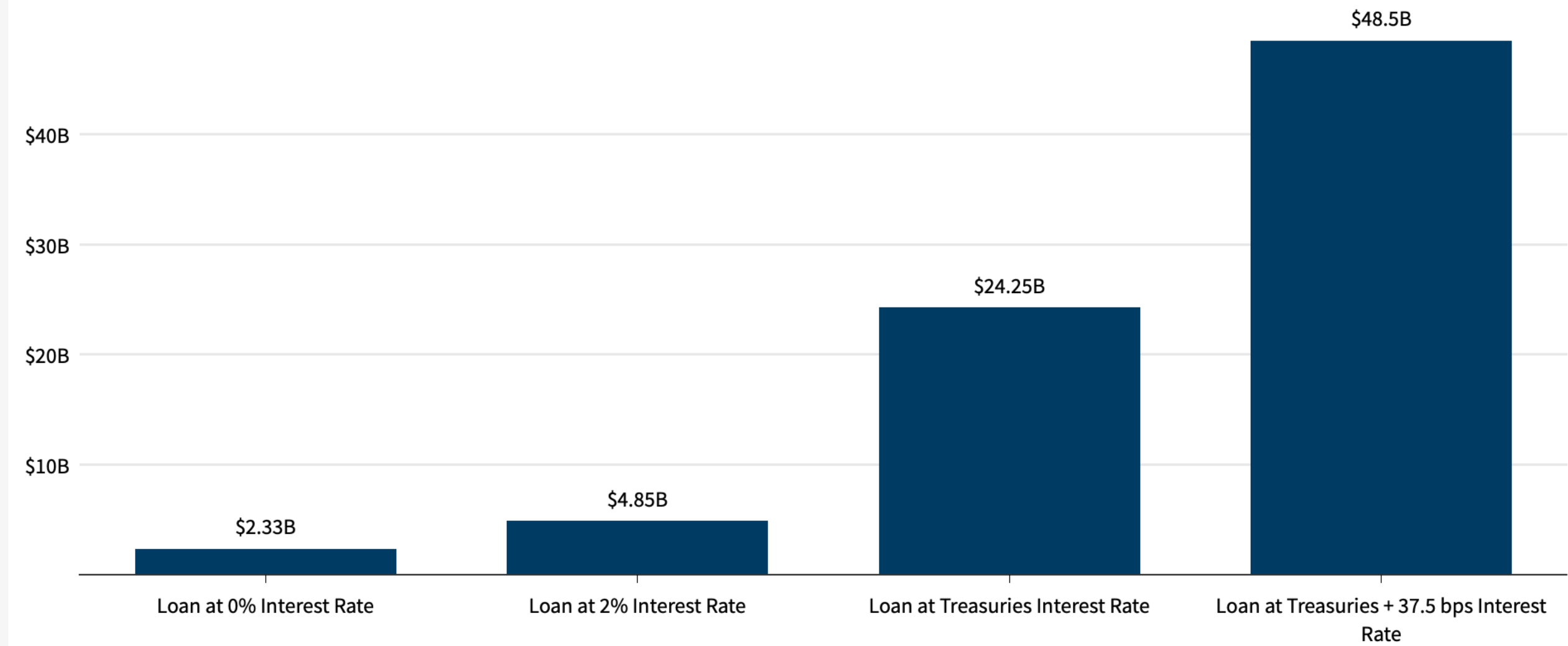
- Grants can account for up to 25% of total project costs
 - Note, this is not 25% of appropriated dollars. Theoretically, all the appropriation could be grants, but this may not be the most beneficial to utility balance sheets or provide the most savings

How do the loans work?

- Loans can be set to 0%, 2%, or the Federal government's cost of money
- New ERA can modify existing RUS debt or refinance third party debt related to a stranded asset
- For Project Awards, loans can account for up to 75% of total project costs – no constraint for System Awards

Maximum New ERA Financing Available By Type

How much financing could be provided with \$970 million in appropriation for grants or credit subsidies for loans.



Note: Preliminary conversations with USDA signal that they may score Loan at the Treasuries Interest Rate similar to Loans at a 2% Interest Rate, which would drastically reduce the amount of loan financing available through New ERA.

Source: RMI Analysis



While New ERA offers flexible financing options there are a few important considerations

Applications will be judged based on GHG reductions

- Includes direct reduction of GHGs, avoided future GHGs, increases in renewable percentage of portfolio, and decreased carbon intensity of portfolio

Need to maintain capitalization ratios

- G&Ts have a strong incentive to maintain an equity-to-total capitalization ratio at a level well above 20% to maintain balance sheet flexibility over time.

Stackability with tax credits

- Applications should maximize the use of direct pay tax credits to pay for new investments in wind, solar, and storage
- Applicants should also keep in mind bonus adders for energy communities and domestic content, as well as penalties for not using domestic content for direct pay-eligible entities

Addressing stranded assets

- New ERA gives co-ops different ways to modify or refinance debt at stranded fossil fuel facilities, and applicants must determine the option that best serves members

Agenda

- 1 *How New ERA creates financially resilient utilities*
- 2 *Rules of the game – understanding credit subsidy*
- 3 *Q&A Part 1***
- 4 *Qualitative logic for selecting a New ERA award*
- 5 *Playing the game – maximizing New ERA benefits*
- 6 *Q&A Part 2*



Agenda

- 1 *How New ERA creates financially resilient utilities*
- 2 *Rules of the game – understanding credit subsidy*
- 3 *Q&A Part 1*
- 4 *Qualitative logic for selecting a New ERA award***
- 5 *Playing the game – maximizing New ERA benefits*
- 6 *Q&A Part 2*



Strategy for developing a New ERA funding request

The Setup

- The applicant has a resource that requires \$X in financing

The Constraints

- Avoid using member equity
- Maintain equity-to-capitalization ratio

The Decisions

- How much loan, at what cost?
- ITC or PTC?

The Results

- Total NPV savings
- Combination of loan, grant, tax credit
- Incremental value of PTC relative to ITC
- Additional equity

IRA unlocks new ways for co-ops to raise the equity required to make investments in their systems

Before IRA, co-ops were constrained in their ability to raise equity quickly

- Co-ops raised equity by retaining member rates
- Many G&Ts are highly leveraged

IRA gives co-ops new tools to quickly raise equity

- New ERA grants
- Direct pay ITC
- Including third-party equity to help capitalize projects

New ERA grants can be structured in different ways to provide equity

- **Direct investment:** RUS disburses the grant directly to the co-op as a system-level grant, and the co-op spends the grant as a direct investment in a new asset
- **Project finance:** The grant takes the place of the co-op's equity contribution in a project
- **Indirect investment:** RUS disburses the grant to a G&T's member distribution co-ops, and the G&T receives the grant in the form of equity contributions from members

Caveat: New ERA grants can fund up to 25% of the cost of a project, so must be paired with other financing (including New ERA loans and tax credits) to fully pay for new investment

The ITC can also be valuable as upfront equity, especially if taking advantage of the adders

50% Direct Pay ITC

30% base ITC (w/Prevailing Wages)



10% for Domestic Content



10% for Energy Communities

Production Tax Credit (PTC) starts at \$27.5/MWh (w/Prevailing Wage)

- Domestic content and energy community adders stack
- Credit is earned for 10 years (inflation adjusted)

✓ **Storage ITC** allows G&Ts to address reliability challenges with variable resources

Caveat: ITCs will be realized at the end of Year 1 in a project's life, so co-ops may require bridge financing

✓ **Solar PTC optionality** provides important benefit for G&Ts with good solar resource

Caveat: co-ops must raise equity from another source to use PTCs

Advantages of ITC vs. PTC for Co-Ops

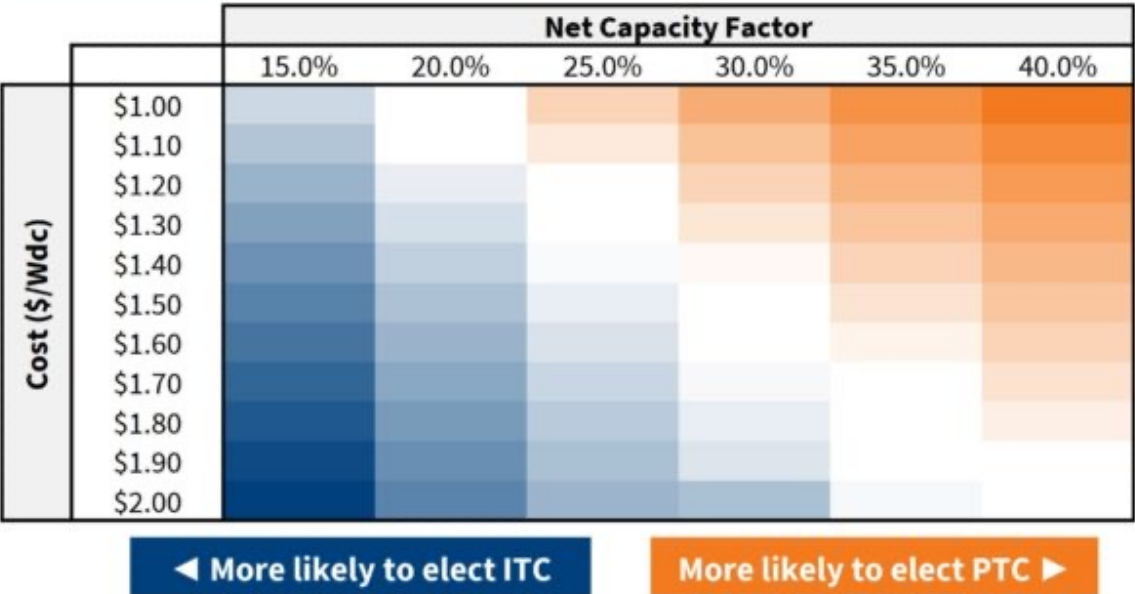
Factors that Favor ITC

- ITC can be used as immediate equity injection
 - 40–50% of equity can be covered by ITC

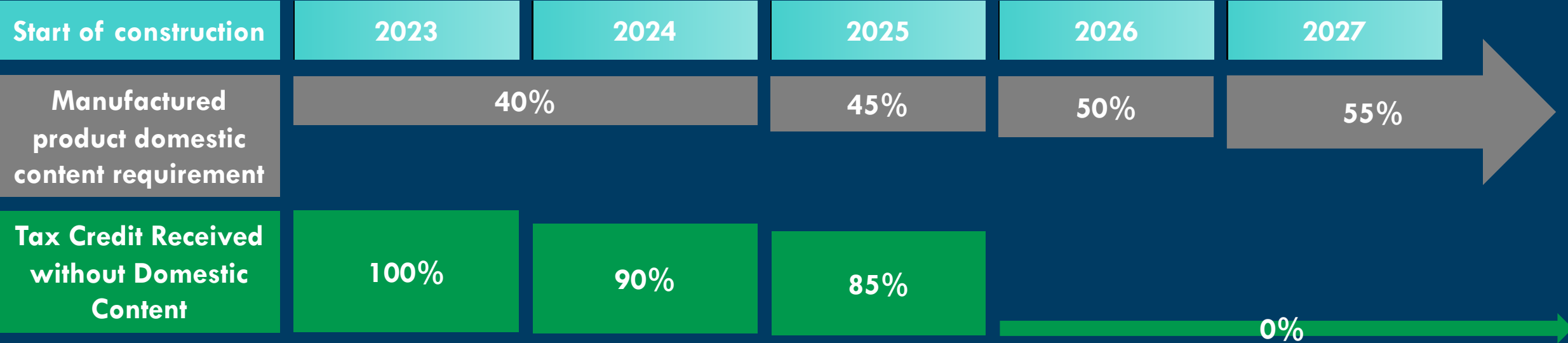
Factors that Favor PTC

- PTC will typically provide higher NPV savings in the long run
 - However, co-ops must raise the required equity from other sources (e.g., New ERA)

Solar PTC vs. ITC Comparison Chart



Direct pay tax credits will require meeting domestic content requirements, so developers should begin project construction as soon as possible



- Start of construction triggers a 4-year safe harbor – a project that starts construction in 2023 would not need to start operations until the end of 2027
- Phaseout can be waived if domestic content material is unavailable or raises costs by more than 25%

Different loan structures can be combined to maximize the benefit of New ERA financing

- **New ERA applicants must determine how much loan to request, and at what cost**
 - Concessional loans take up more credit subsidy per dollar of lending
 - Loans at the Federal government's cost of money use less credit subsidy per dollar and can enable large amounts of spending
- **Applicants should consider ways that their funding package can build financial strength**
 - Total NPV savings
 - Additional equity secured from grants or ITC

Agenda

- 1 *How New ERA creates financially resilient utilities*
- 2 *Rules of the game – understanding credit subsidy*
- 3 *Q&A Part 1*
- 4 *Qualitative logic for selecting a New ERA award*
- 5 *Playing the game – maximizing New ERA benefits***
- 6 *Q&A Part 2*



Strategy for developing a New ERA funding request



The Set Up

- Add portfolio of 1.2 GW of solar, 700 MW of wind, and 1 GW of storage in 2025
- Factor down fossil asset over next 2 years vs. BAU 8 years
 - 1 GW coal plant, 60% CF, \$400 million in unrecovered net plant balance



The Constraints

- Don't want to use member equity
 - Doing so would require additional rate increases
- Keep equity-to-capitalization ratio at 25%
 - Otherwise, co-op risks credit downgrade
- If taking ITC, assume Year 1 bridge financing at WACC
 - WACC assumed at 5%



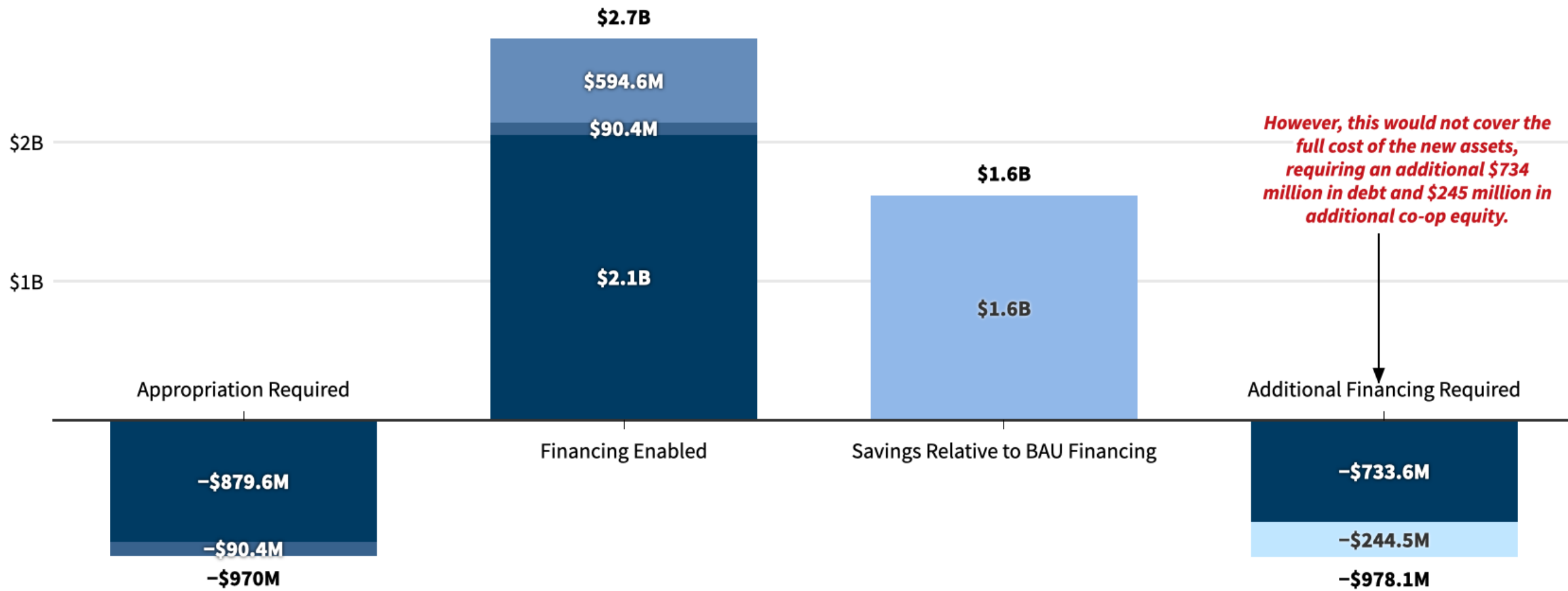
The Approach

- Assess different loans at different costs
 - 0%, 2%, Treasuries
- Take out grants with remaining appropriation after loans
- Begin by taking PTC for wind and solar assets, switch to ITC if the project requires more equity
 - PTC provides greater savings, but ITC provides equity infusion

0% Loan with PTC

\$970 million in New ERA appropriation while using the PTC for wind and solar would enable \$2.1 billion in loans at a 0% interest rate, along with \$90 million in grants and \$594.6 million from the monetization of the battery storage ITC. This would lead to a total of \$1.6 billion in savings over 30 years compared to traditional financing without New ERA.

Loans Grants ITC Monetization Savings Additional Co-Op Equity Required



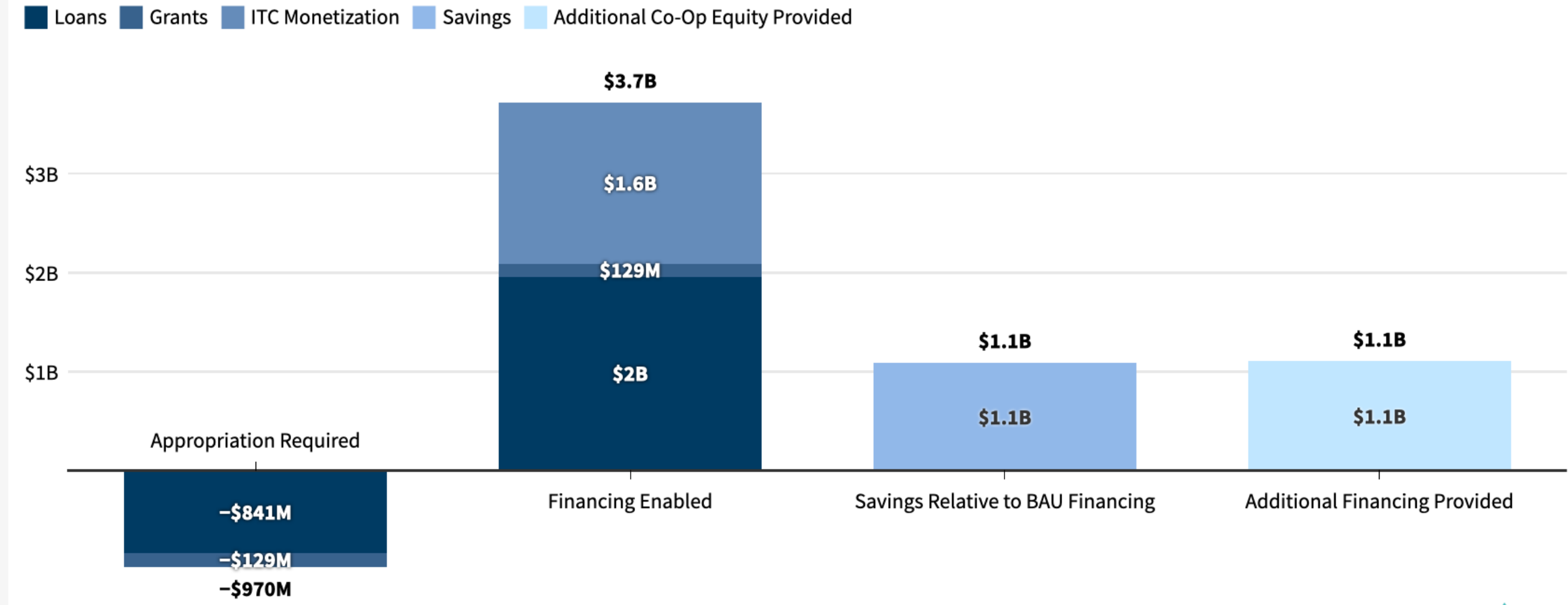
However, this would not cover the full cost of the new assets, requiring an additional \$734 million in debt and \$245 million in additional co-op equity.

Source: RMI Analysis



0% Loan with ITC

\$970 million in New ERA appropriation while using the ITC for wind and solar would enable \$2 billion in loans at a 0% interest rate, along with \$129 million in grants and \$1.6 billion from the monetization of the solar, wind, and battery storage ITCs. This would lead to a total of \$1.1 billion in savings over 30 years compared to traditional financing without New ERA. Additionally, this would cover all of the co-op's equity needs from these loans, and provide an additional \$1.1 billion to improve the equity position of the co-op.

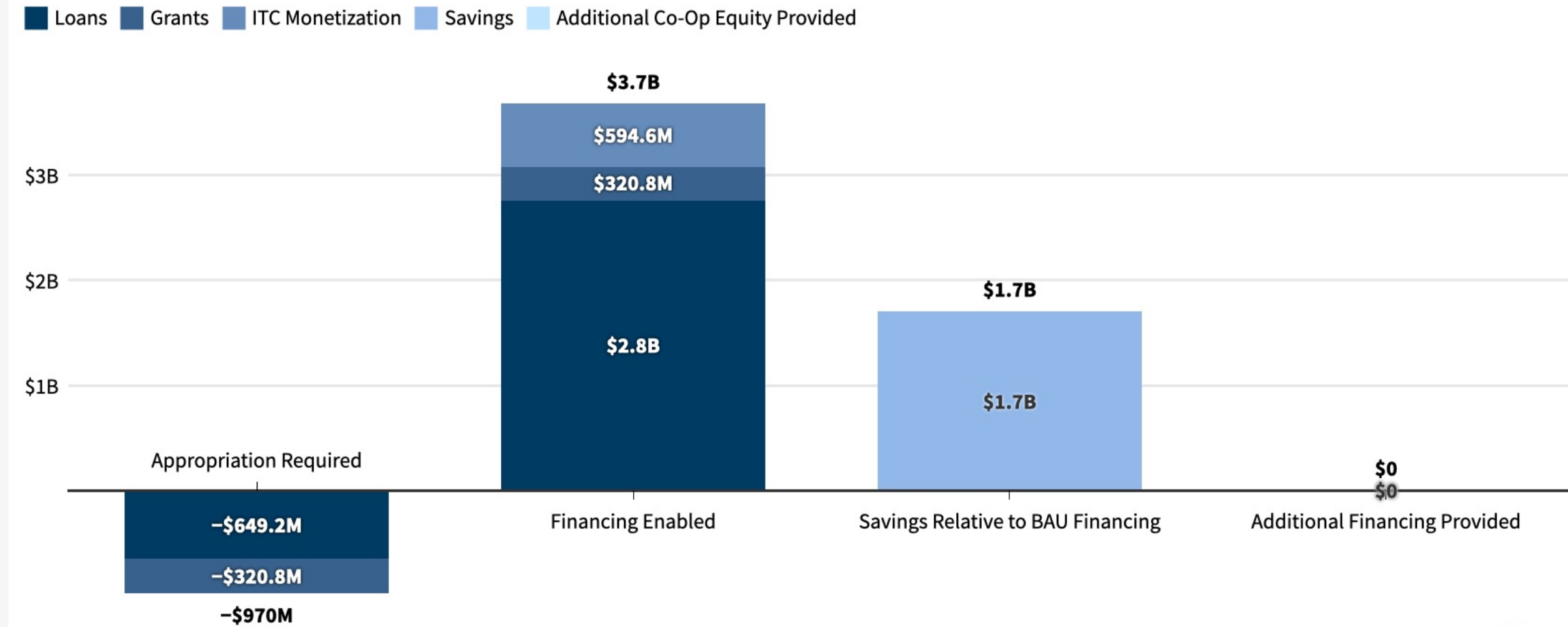


Source: RMI Analysis



2% Loan with PTC

\$970 million in New ERA appropriation while using the PTC for wind and solar would enable \$2.8 billion in loans at a 2% interest rate, along with \$320 million in grants and \$595 million from the monetization of the battery storage ITC. This would lead to a total of \$1.7 billion in savings over 30 years compared to traditional financing without New ERA. Additionally, this would cover all of the co-op's equity needs from these loans, but provide no additional co-op equity infusion.

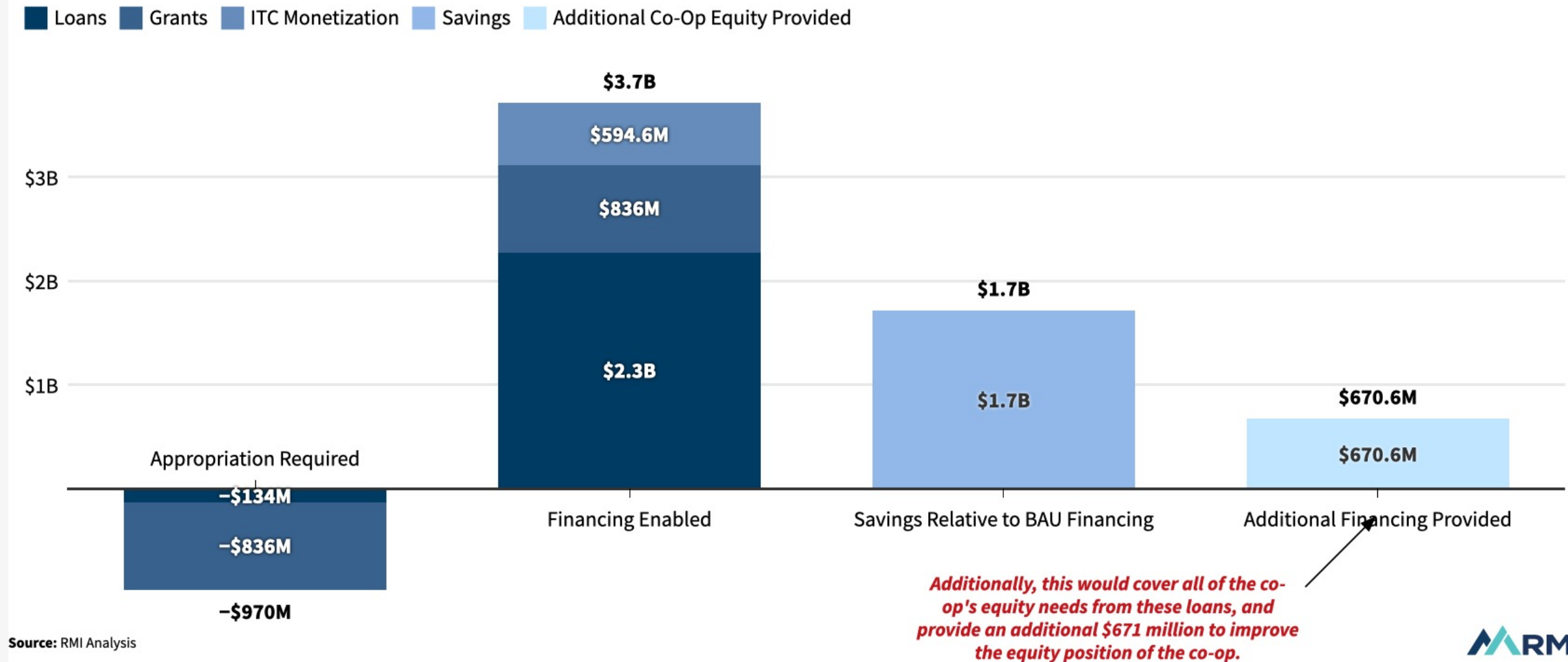


Source: RMI Analysis



Treasuries Loan with PTC

\$970 million in New ERA appropriation while using the PTC for wind and solar would enable \$2.3 billion in loans at the Treasuries interest rate, along with \$836 million in grants and \$595 million from the monetization of the battery storage ITC. This would lead to a total of \$1.71 billion in savings over 30 years compared to traditional financing without New ERA.



Source: RMI Analysis



Agenda

- 1 *How New ERA creates financially resilient utilities*
- 2 *Rules of the game – understanding credit subsidy*
- 3 *Q&A Part 1*
- 4 *Qualitative logic for selecting a New ERA award*
- 5 *Playing the game – maximizing New ERA benefits*

6 Q&A Part 2



Next Steps

1

Bootcamp #2: Defining an Ambitious and Affordable New ERA Plan

June 13th (Tomorrow) at 10am MT

2

Slides, recordings, and additional resources will be emailed to attendees following the trainings and posted publicly soon after.

3

RMI is funded to provide one-on-one support to New ERA applicants – please reach out if you would like to discuss financing strategies in more detail

Thank you for attending

Uday Varadarajan – uvaradarajan@rmi.org

Sam Mardell – smardell@rmi.org

Michael Liebman – mliebman@rmi.org