



Strategies in Residential Energy Efficiency Financing

Leveraging Secondary Markets

Presentation to NASEO Financing
Committee

May 21st, 2014



Leveraging Secondary Markets

Presentation Topics



- Kilowatt Financial Overview and Primary Strategy
- Secondary Market Overview
- Whole Loans and Securitization
- Risk Elements in a Secondary Market
- Collaboration Opportunities with State Energy Offices

Overview of Kilowatt Financial

Clean Energy Consumer Finance



Leading consumer lender
focused exclusively on
clean energy and
energy efficiency

- ✓ *LOW COST* consumer products
- ✓ *FAST* approval cycle
- ✓ *FLEXIBLE* pricing options
- ✓ *EASY* funding processes

Solar Financing Business

Solar System Leases and PPAs

- 20 year lease or PPA contracts
- Monthly and prepaid alternatives
- No money down; consumer saves money day 1
- 0.0%, 1.5% or 2.9% escalators

Solar System Purchase Finance

- 15 year term
- APRs as low as 2.99%
- Dealer rate buy-down ability
- Flexible promotional options
- Use REEPC to reduce monthly payments in years 2-15

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Energy Efficiency Financing Business

- Up to 12 year terms
- APRs as low as 0.0%
- Dealer rate buy-down ability
- Custom Dealer pricing options
- Down to 600 FICO
- Broad range of eligible improvements



Electric

- Solar PV systems
- Battery storage devices
- Fuel cells and other power generators
- Major energy consuming appliances
- Lighting and fans
- Electric car chargers



HVAC

- Repair or removal and replacement of all HVAC equipment
- Installation of gas service
- Thermostats, wood-heating appliances, fireplace modifications, coolers, exhaust fans, dehumidifiers, etc.



Building

- Doors, windows, shutters, screening
- Insulation and siding
- Roofing
- Sunrooms
- Disaster prevention improvements



Water

- Plumbing
- Repair or removal and replacement of water heaters
- Solar thermal water heaters
- Water conservation measures

Overview of Kilowatt Financial

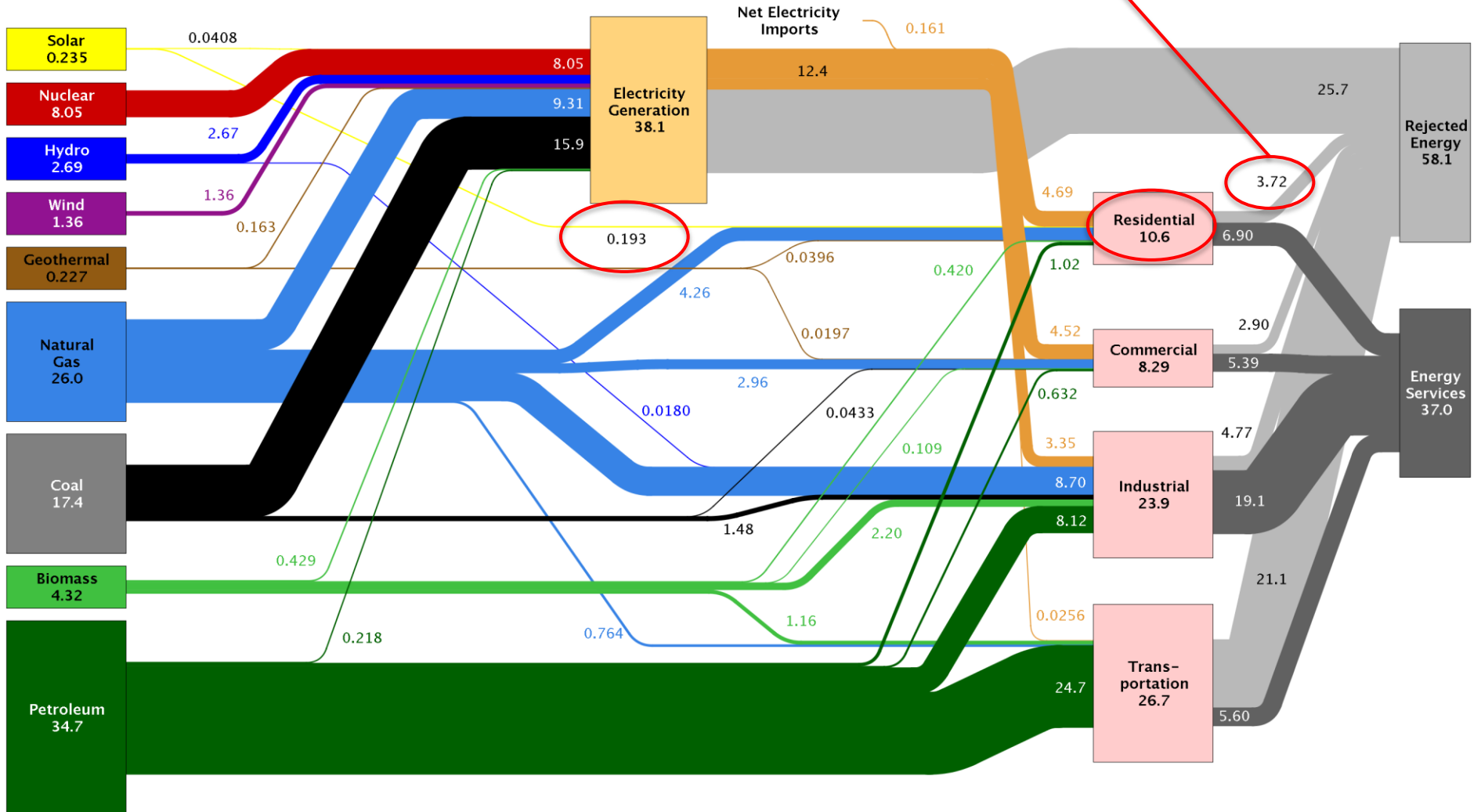
Why Clean Energy and Energy Efficiency?

Residential energy waste

- = More than one third of total energy generated
- = More than 19X residential solar energy generated



Estimated U.S. Energy Use in 2012: ~95.1 Quads



Source: LLNL 2013. Data is based on DOE/EIA-0035(2013-05), May, 2013. If this information or a reproduction of it is used, credit must be given to the Lawrence Livermore National Laboratory and the Department of Energy, under whose auspices the work was performed. Distributed electricity represents only retail electricity sales and does not include self-generation. EIA reports consumption of renewable resources (i.e., hydro, wind, geothermal and solar) for electricity in BTU-equivalent values by assuming a typical fossil fuel plant "heat rate." The efficiency of electricity production is calculated as the total retail electricity delivered divided by the primary energy input into electricity generation. End use efficiency is estimated as 65% for the residential and commercial sectors 80% for the industrial sector, and 21% for the transportation sector. Totals may not equal sum of components due to independent rounding. LLNL-MI-410527

Kilowatt's Strategy

Drive Down Cost of Financing for End Consumers



■ Primary Strategy:

Create clean energy and energy efficiency financing products:

- 1. With low APRs to compete with bank loan products**
- 2. Without the use of public funds (utility, state, ratepayer, taxpayer)**

■ When public funds are available as subsidized capital or structural enhancement:

Incorporate such public capital into our financing products to further drive down the cost of financing for consumers

Banks vs. Finance Companies

Competing in the Private (Unsubsidized) Market



Banks

- ✓ Access to cheap deposit funding
- ✗ Typical bank challenges with respect to the sales process:
 - Lack of flexibility (credit spectrum, loan size, product types)
 - “One size fits all” approach
 - Limited real time credit/e-doc capabilities
 - Limited ability to “private label” solutions
 - Regulatory constraints on size/growth

Finance Companies

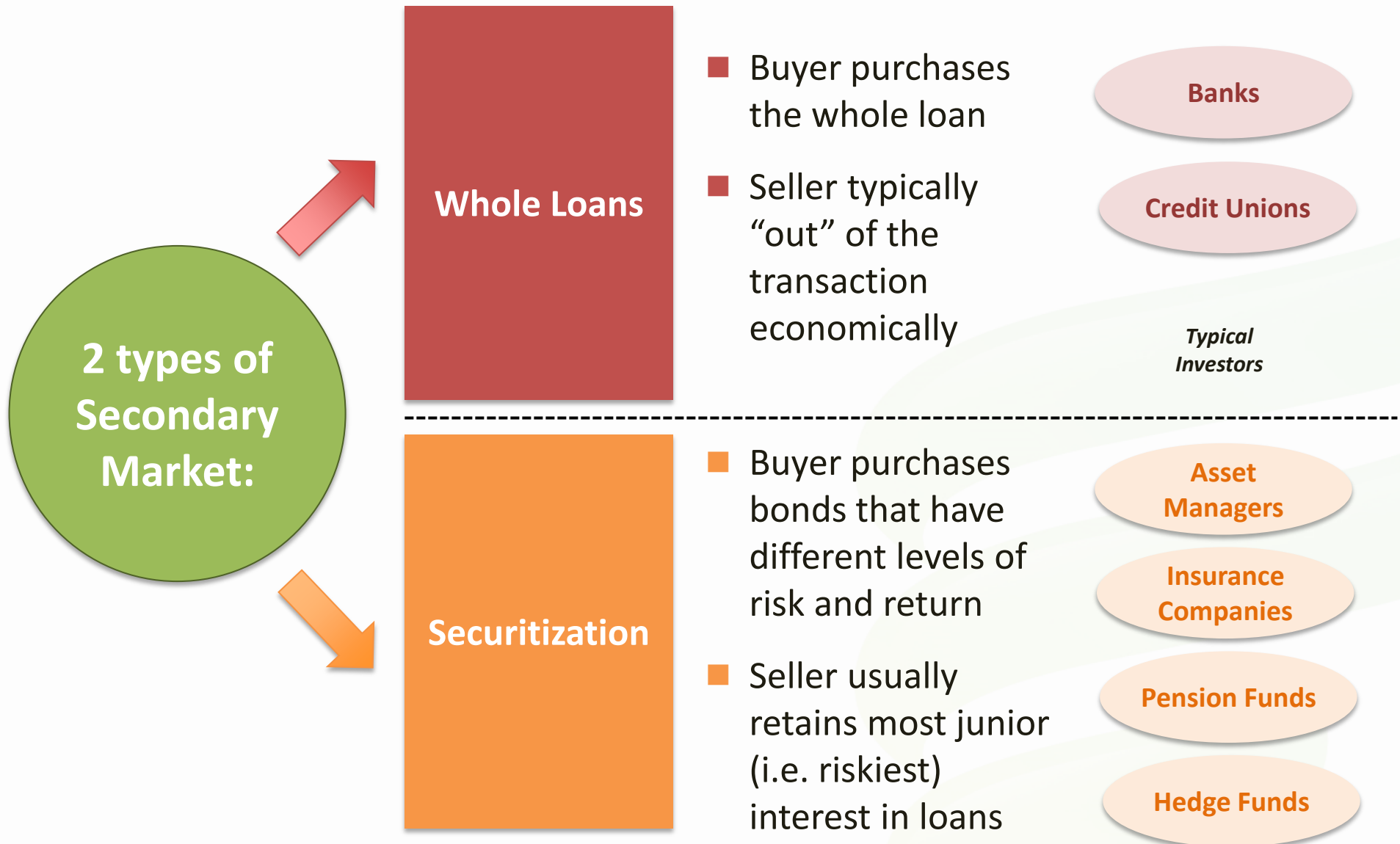
- ✓ Flexibility and operational capabilities to enhance the sales process
- ? How do you compete with bank deposit funding??



**Securitization
(AAA/AA/A Rated)**

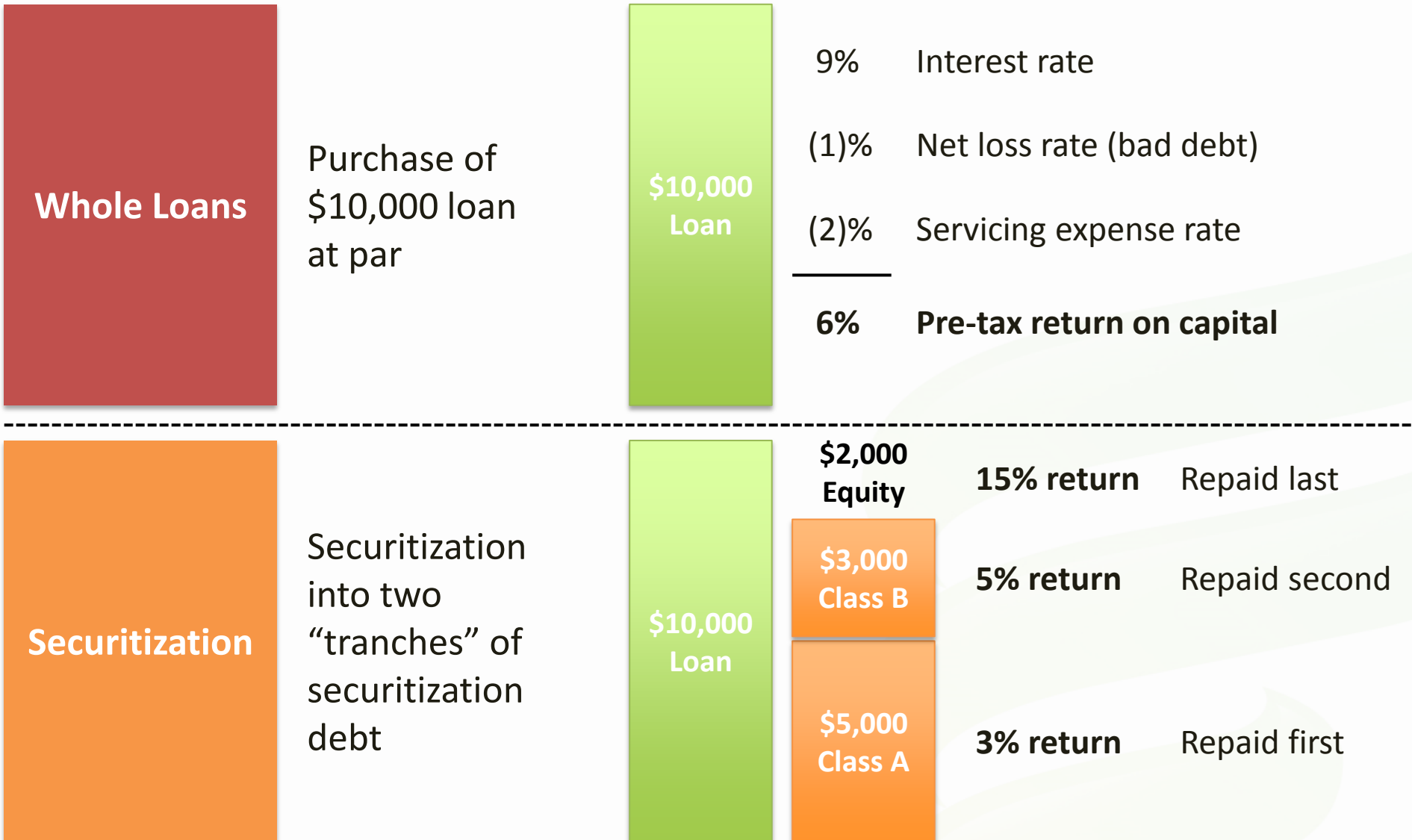
Two Types of Secondary Market

Whole Loans and Securitization



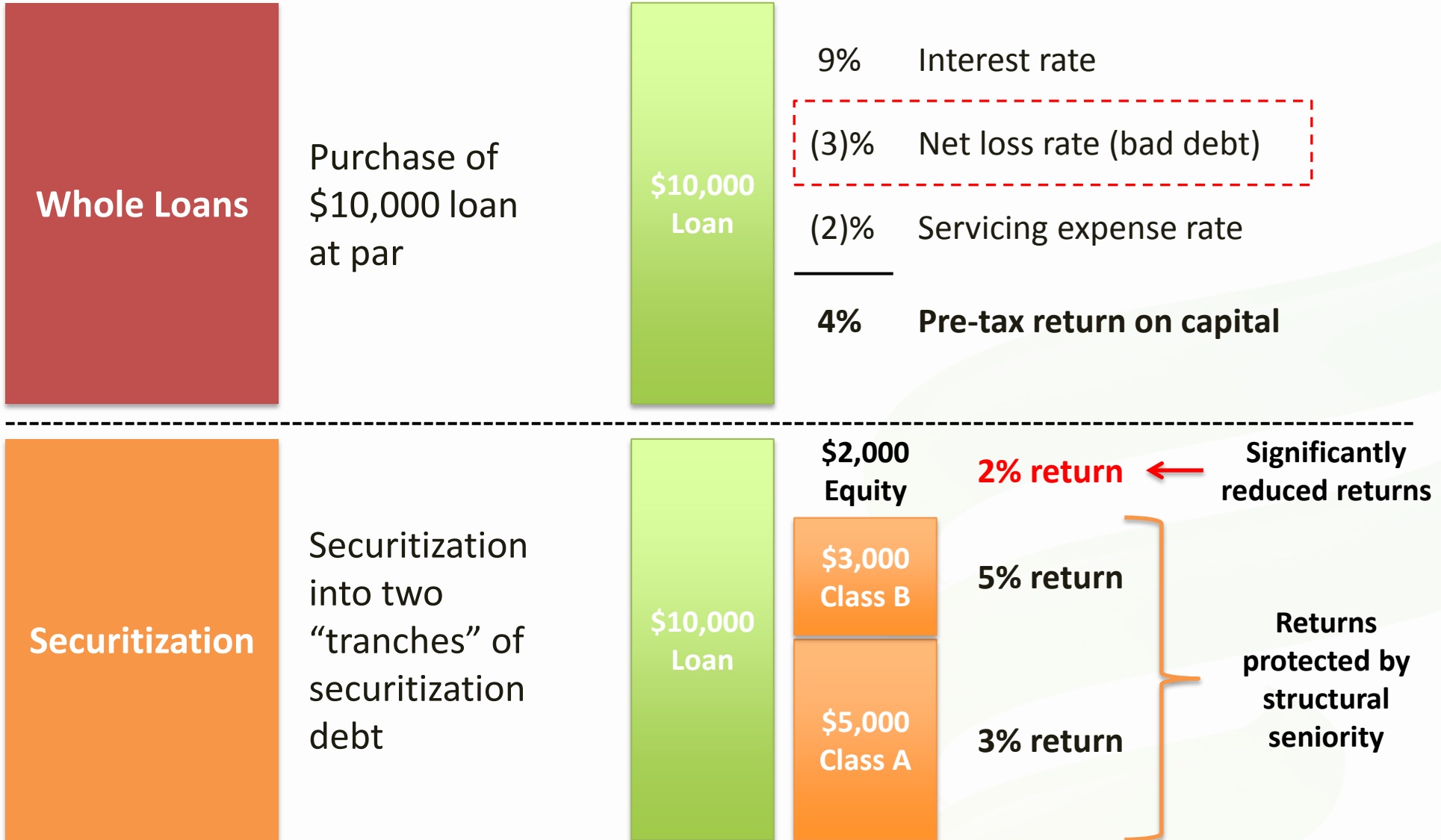
Whole Loans vs. Securitization

Economics: Base Case Net Losses



Whole Loans vs. Securitization

Economics: Stress Case - 3x Net Losses



Risk Elements

What are secondary market buyers principally worried about?

What is likely to happen with unemployment rates, economic growth, housing prices, and supply of credit?

How competent is the originator at evaluating consumer credit? Will losses perform in line with expectations?

Is the consumer likely to have any issues with workmanship or equipment quality?



If prepayments are higher than expected, premiums paid may be at risk.

If lower, cash flows may be extended.

Does the servicer have the experience and ability to maximize cash flow while maintaining compliance levels? Acceptable infrastructure and technology?



What is the probability that the primary services provider is not around for the full life of the loan?
What redundancy is in place?



Are all origination and servicing policies, procedures, and practices in compliance with all applicable laws and regulations?
Are consumers being treated fairly?

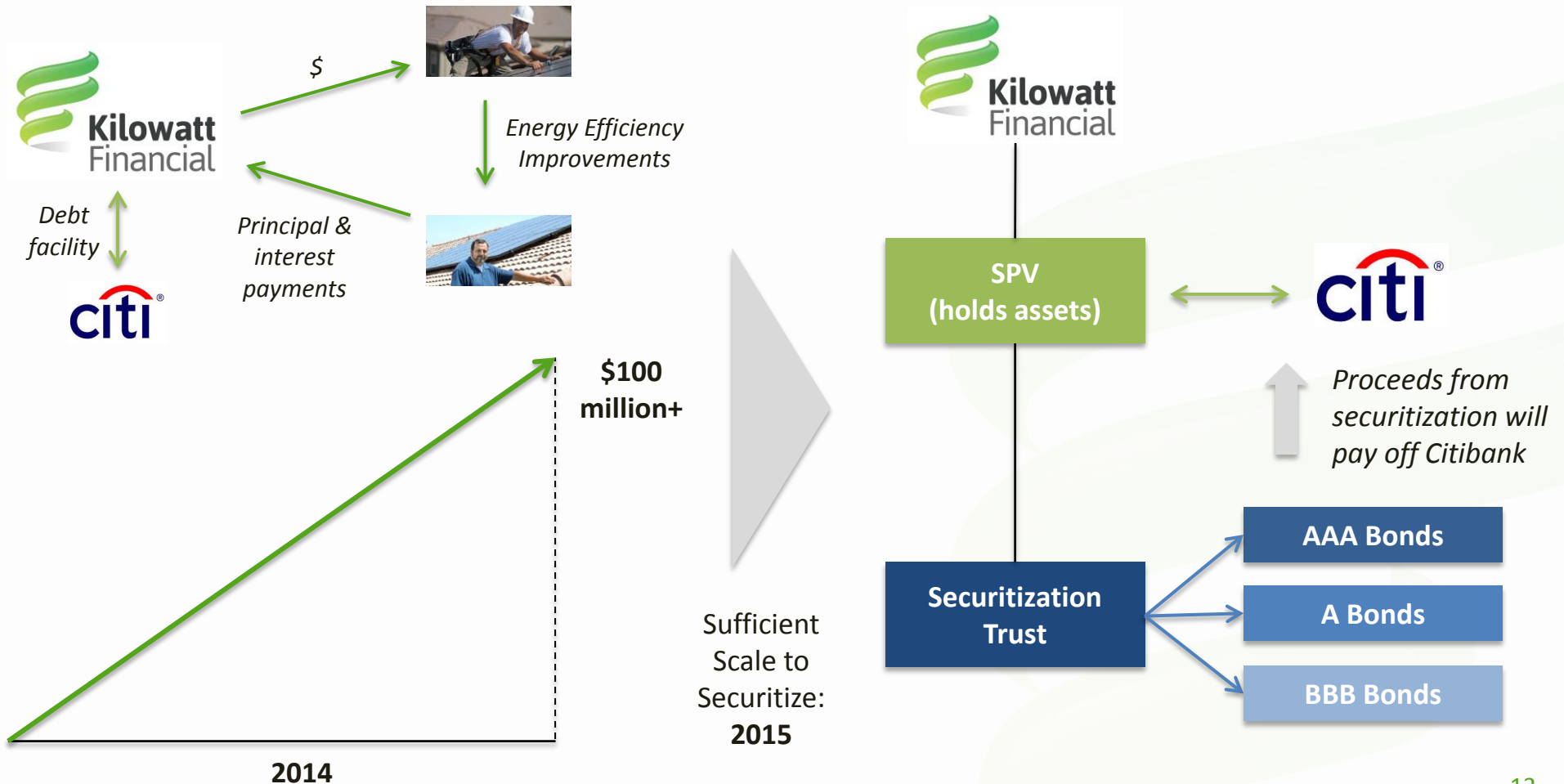
Kilowatt Financial Path to Securitization

Plan to Reach Secondary Market: Citibank Warehouse Facility



■ Our Citibank facility will allow us to reach securitization:

- Does not require utilization of subsidized funds
- Can be utilized with subsidized programs to reduce end interest cost to consumer



Collaboration Opportunities with State Energy Offices



Overview

	Marketing, Education & Outreach	Incentives	Credit Enhancements	Debt
State Energy Office Role	Mobilize resources to raise contractor and / or consumers awareness about access to energy efficiency financing	Allocate capital toward grants, rebates, or buydowns for clean energy projects	Establish loan loss reserve fund to cover portfolio losses up to a pre-determined cap; typically utilized for energy efficiency programs	Provide subordinated, mezzanine, or senior debt to put public capital to work at larger scale
Impact	Equips contractors with an effective tool to reach more consumers and close more loans	Generates attractive consumer economics which helps to drive program volume	Enables lenders to slightly lower interest rates and potentially expand access to broader range of consumers	Provides significant amount of capital at more flexible / attractive terms than existing alternatives
Tradeoffs	<ul style="list-style-type: none"> ✓ Generates volume ✓ Low complexity ✓ Low (or no) capital requirements ✓ High flexibility ✗ No return on capital 	<ul style="list-style-type: none"> ✓ Attractive consumer economics ✓ Low complexity ✓ High flexibility ✗ No return on capital 	<ul style="list-style-type: none"> ✓ High capital efficiency ✓ Potential to expand program access ✗ Structural and operational complexity ✗ Below-market returns 	<ul style="list-style-type: none"> ✓ Good capital efficiency ✓ Adequate returns ✓ Lower risk profile than Credit Enhancement ✗ Structural and operational complexity ✗ Requires significant amount of capital

Thank You



- Kilowatt welcomes the opportunity to build residential clean energy financing programs with state and local energy offices
- Factors to consider:
 - Consumer protection is of paramount importance
 - If return of capital is important: alignment of incentives is critical
 - Remember: there is no substitute for hard work and operational expertise
- Kilowatt can provide more detailed information on products and pricing upon request
- Please do not hesitate to contact us with any questions or comments:

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