

# Buncombe County Energy Loan Fund

# Financing Process

- ▶ Unsecured personal loans for prequalified energy measures or improvements recommended by a Contractor and the loan program administrator.
- ▶ Ideally: business, nonprofits multifamily and public sector properties would be eligible too.
- ▶ Financing options available through a partner commercial lender or lenders
- ▶ Pre-approved contractors for all eligible upgrades
- ▶ “Non-traditional” longer loan terms more closely tied to the specific upgrade and its expected useful life
- ▶ “Credit Enhancement”

# Financing Process

- ▶ Most major home upgrades are made on an “emergency” basis
- ▶ Contractors have access to financing but most is high interest, short term, low tech, and borderline predatory.
- ▶ Often emergency financing is completed for small amounts in the \$5-15k range
- ▶ Climate conscious individuals at all income levels are still committing to fossil fuel infrastructure

# Sample Improvements

## Residential

- ▶ Rooftop Solar
- ▶ HVAC/Heat Pump Upgrades
- ▶ Home Electrical Panel Upgrades
- ▶ EV Charging
- ▶ Hot Water Heating

## Commercial

- ▶ Rooftop Solar
- ▶ HVAC upgrades or heat pump conversion
- ▶ Level 2 EV Charging
- ▶ Energy Efficiency
- ▶ Battery Storage
- ▶ Hot Water

# How it Could Work

1. Find your pre-approved contractor through the Loan Fund and receive estimates on qualifying improvements
2. Apply for financing
3. Work with lender and kickoff work

# Portfolio Approach to lending PLUS Leverage

- ▶ An LLR structure works best when the target market is a portfolio with a large number of small transactions. Typical residential energy efficiency loans, for example, are in the range of \$5k to \$15k, and a typical program will aim to fund hundreds, and possibly thousands, of loans. Thus, default of a single loan or several loans will represent a small portion of the total portfolio.
- ▶ Typical leverage ratio is 20:1. Meaning with \$1 million available in funds from the County for the LLR, a 5% loss reserve could produce \$20 million in capital to lend.

# Loan Loss Reserve or other Credit Enhancement Example

## SAMPLE CALCULATION

The table below presents a sample calculation for an LLR program budget and risk-sharing formula.

Loan Loss Reserve Fund Program, Sample Budget and Risk-Sharing Formula Calculations		
1	LLR grant budget	\$1 million
2	Grant funds for program development and operations	\$100,000
3	Net funds for LLR escrow account	\$900,000
4	"First losses" as % of total original principal	5%
5	Share of first losses borne by LLR	90%
6	Share of first losses borne by financial institution partner	10%
7	Total lending that can be supported with this LLR risk-sharing formula	\$20 million
8	Average portion of energy efficiency projects paid by loans (homeowners/utilities/others cover the remaining 20%)	80%
9	Total energy efficiency project investment that can be supported	\$25 million
10	Leverage ratio #1 (LLR funds to total lending product size supported)	22.22
11	Leverage ratio #2 (LLR funds to total energy efficiency project investment supported)	27.78

# What is a Loan Loss Reserve?

- ▶ A structure like a loan loss reserves or loan guarantees, help de-risk investments for private investors, enabling more capital to flow to clean energy projects. If a private investor is hesitant to enter a new market, or is only willing to offer unfeasibly high interest rates, a credit enhancement can provide security to a lender and improve deal economics for the borrower.
- ▶ And because these tools are only used to support mature, low-risk technologies, the credit enhancements allow investors to become familiar with viable markets while minimizing public sector expenditure.

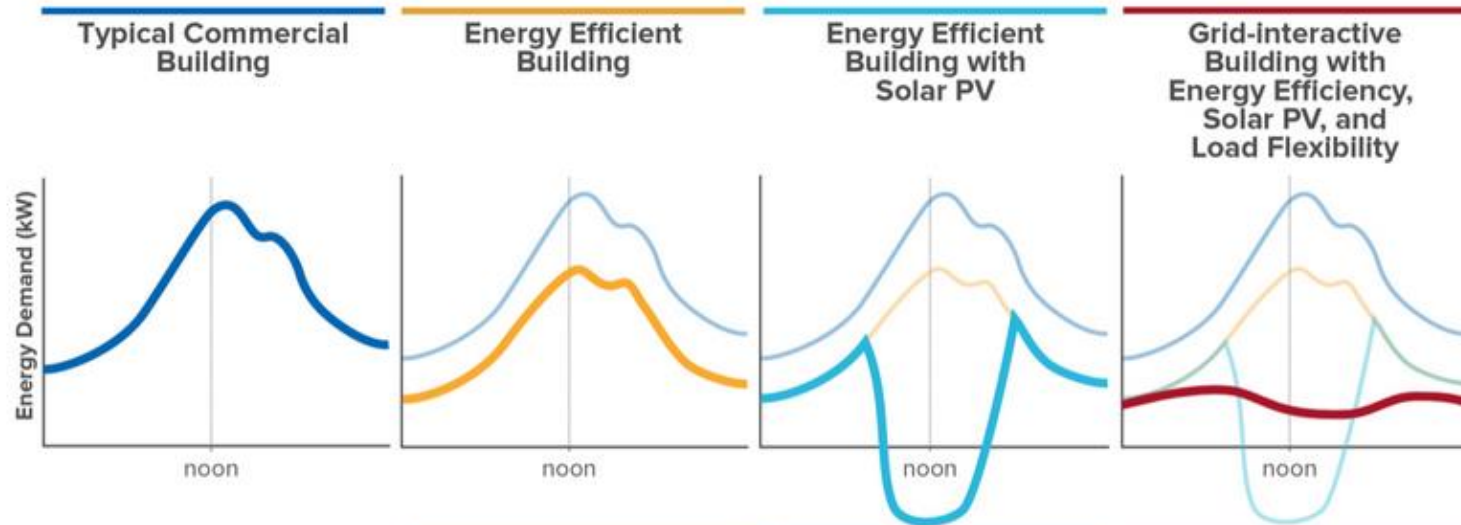


# Questions

- ▶ How large of a program is necessary and what is necessary to leverage capital, and reduce interest rates with minimum County investment?
- ▶ Possible Program administrator?
- ▶ Credit Score, Min-Max
- ▶ Level of County involvement

# Virtual Power Plants and Demand, Response Enabled Appliances, and the Loan Programs Office

## Grid Integrated Building: Load Profiles



**Efficiency improves curve (lowers and flattens)**

- + Reduces energy consumption and demand charges

**Adding solar offsets significant loads, often coincident with utility peak loads**

- + Reduces energy consumption and demand charges
- BUT...can cause steep ramping of loads and utility issues

**Grid integration combined with the other strategies shifts building loads to match generation, further reducing peaks**

- + Optimizes energy consumption and demand charge savings while supporting grid stability and resilience
- + Demand response capability during grid peak scenarios provides additional revenue

# Potential Corporate Partners

