AVAILABILITY OF FINANCIAL RESOURCES FOR RENEWABLE ENERGY: HOW INCREASED ACCESS CAN LEAD TO A BETTER FUTURE

Khaalil Williams-Frierson, Master of Development Practice; Advisory Committee: Dr. Renata Serra (Chair), Dr. Kristin Joys

INTRODUCTION

The adoption of **renewable energy** can be an **expensive venture** for individuals and communities. For example, the decision to install solar energy in people's homes depends on the amount of sunlight needed for solar panels, the **capacity to purchase** the expensive technology, and the required professional support. For older homes, a roof replacement is also necessary, which increases the costs further. To pay for this expensive process, many homeowners **apply for loans** to finance the installation of solar panels on their homes. However, not everyone qualifies for loans as financial situations vary drastically from person to person, and banks authorize loans on the basis of a person's income and credit history/score. Therefore, **banks** play a crucial role in sustainable development, as they are the source of **essential funding for essential investments**, an example being increasing renewable energy accessibility for all.



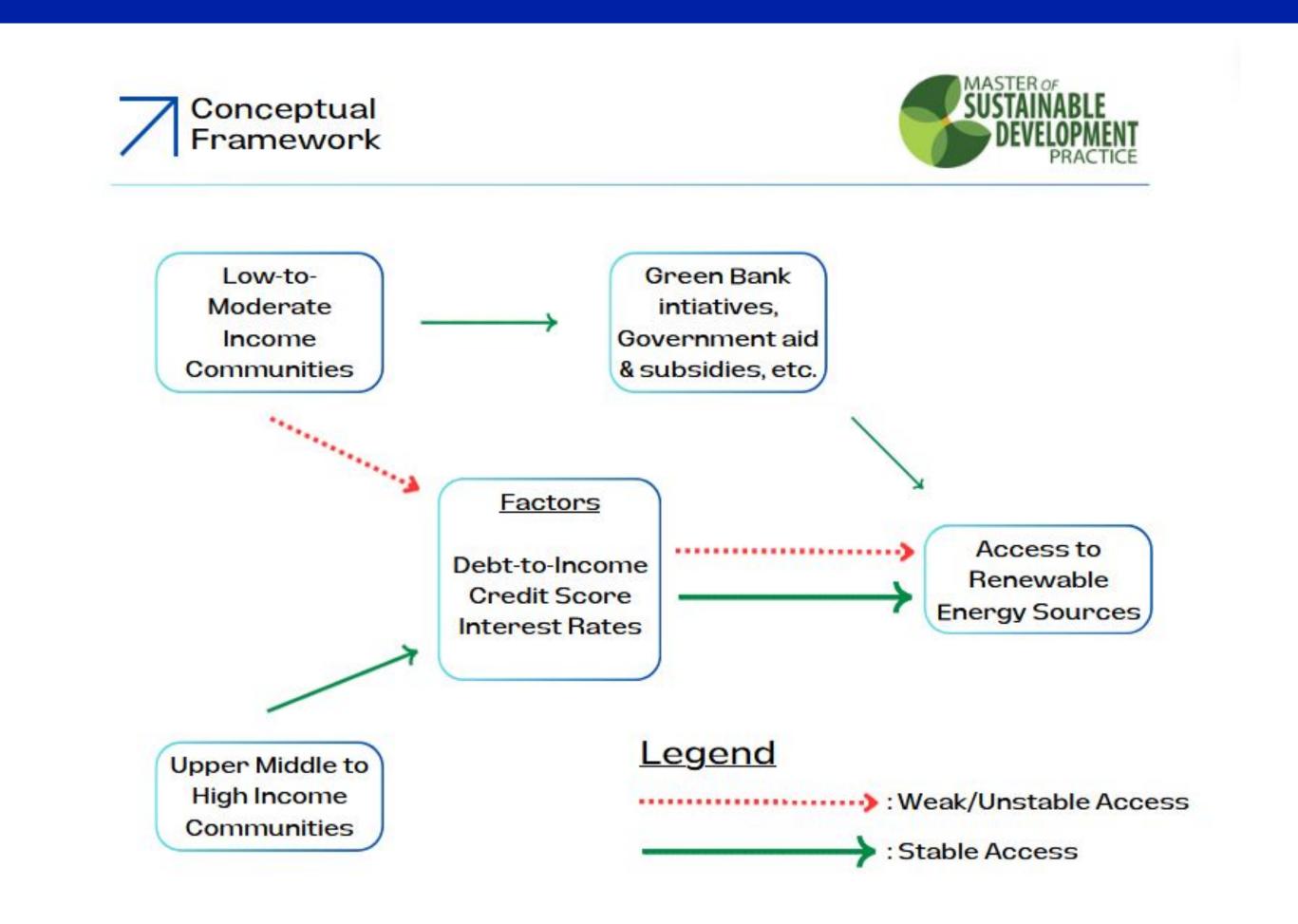
https://www.salesfocusinc.com/10-reasons-why-people-should-choose-community-solar/

HOST ORGANIZATION



Climate First Bank (CFB) is a recently established bank founded in 2021 by Ken LaRoe. The company is based in Saint Petersburg, FL with branch locations in Winter Park and Mount Dora. CFB is the world's first Federal Deposit Insurance Corporation (FDIC)-insured bank with a main focus on sustainability and the environment. During Summer 2023, I had the opportunity to work as an intern at CFB, reporting to the company's Chief Technology Officer, Marcio de Oliveira as well as Dema Headly, Lauren Dubé, and Dominic Zola.

CONCEPTUAL FRAMEWORK



METHODS

- Participatory Analysis
 - > Worked as an intern for Climate First Bank in the Digital Branch
- Gained knowledge on loan process, specifically solar loans
- Gained knowledge on impact reporting
- Spatial Analysis
- ➤ Looked at declined applications and determined how many were from low-to-moderate income areas
- Anonymous Survey
- > Survey sent out to Climate First Bank employees
- Asked questions about sentiments towards climate change and the bank's efforts towards

ACKNOWLEDGEMENTS

Thank you to Dr. Renata Serra and Dr. Kristin Joys for their guidance and always being a beacon of support I could look to.

Thank you to Climate First Bank for giving me the wonderful opportunity to intern for your company and to gain valuable experience.



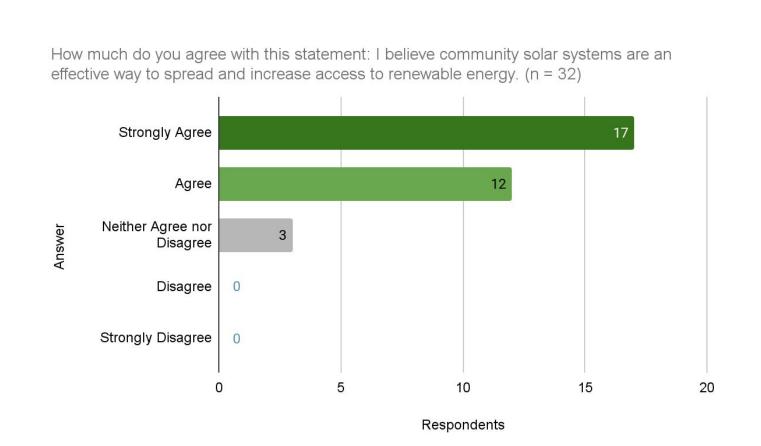


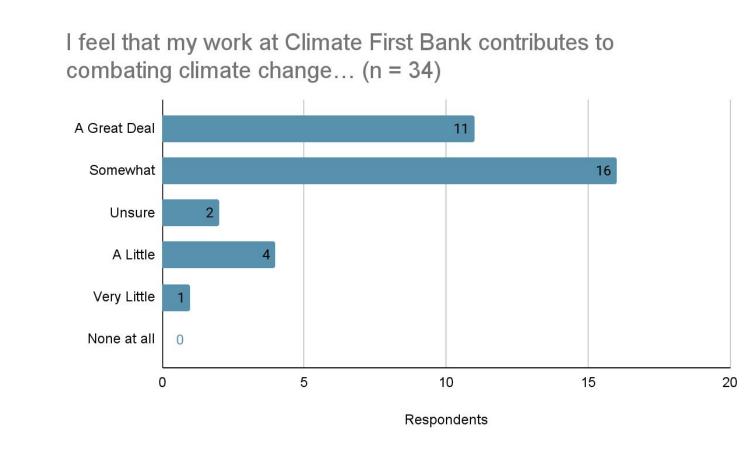
RESULTS

- After the spatial analysis was completed of the declined applications (1,190 application sample size), these were the results
 - The belief that there would be more declined applications coming from low to middle income communities was incorrect
 - The biggest issue for low to moderate income communities and non-LMI communities when it comes to applying for loans is high debt-to-income ratios.



- The results of the survey showcased the sentiments of employees at CFB
 - Most of the respondents believed that community solar loans would be a good way to spread access to renewable energy
 - ➤ Most respondents believe their work at Climate First Bank aids in the fight against climate change
 - Many of the employees believe the customers align CFB's mission in doing what's right as well as providing services to help the community





CONCLUSIONS

Renewable energy is the future if we want to maintain our current way of life, and in order to guarantee this, access to renewable energy needs to be universal. While I am happy to say that we are headed towards the right direction, more could be done. Green banks can be a significant driving force in expanding access to renewable energy in many ways, including contributing to the construction of community solar energy projects, working to help aid local communities through financial education, etc. Better financial situations for those in LMI communities may not instantly help them invest into a renewable energy project, but it can help make it more of a possibility. These efforts mentioned prior should be done in collaboration with the government and nonprofits, as the combined effort could lead to better results and more progress in a shorter time frame. The sentiment is there as found by the conducted surveys, so the next big step is action.

