

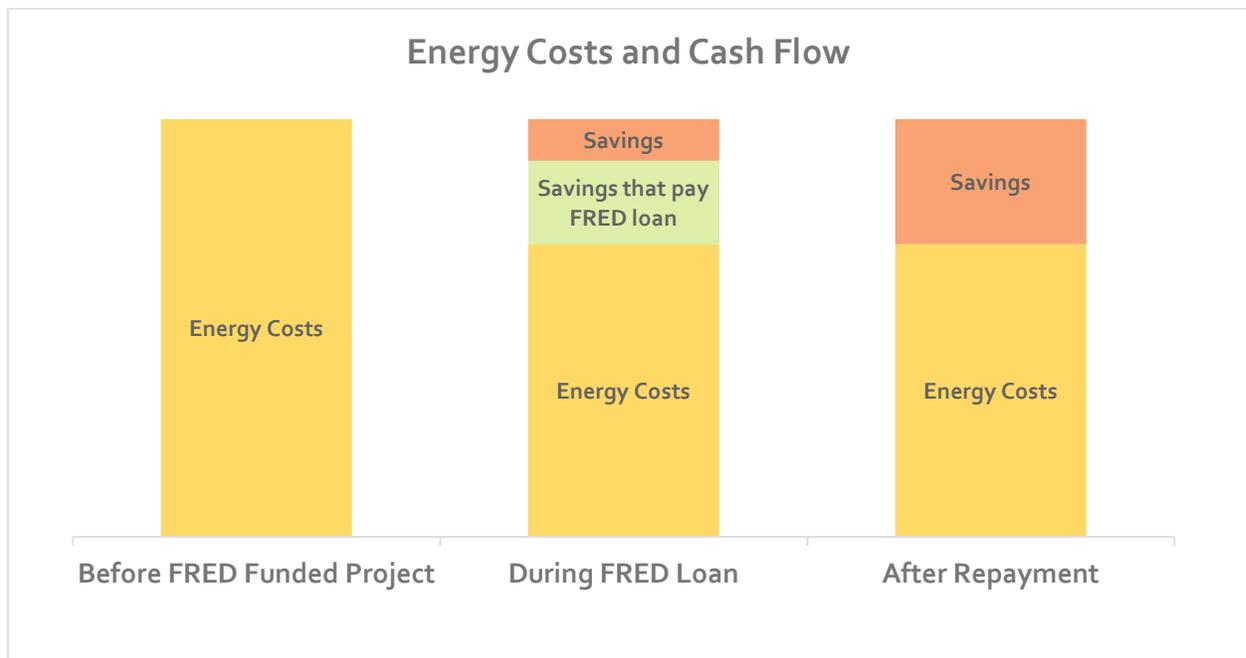
FUND TO REDUCE ENERGY DEMAND

ACCESS TO FUNDING FOR PROJECTS

King County established the internal Fund to Reduce Energy Demand (FRED) in 2014 to overcome a major hurdle for county agencies trying to pursue energy and water conservation projects: securing up-front capital needed to support the initial investment. The FRED Program enables an internal loan that is paid off by the agency's operating savings from the project. To date, King County's internal FRED program includes 18 completed or in-development projects including lighting retrofits, a solar panel installation, and some plumbing improvements, totaling approximately \$3.5 million dollars of investment that will result in \$500,000 dollars in annual savings.

Cities in King County face similar barriers to financing resource efficiency and renewable energy projects. The County is expanding its internal loan program to city partners through a companion City-FRED program (C-FRED). Participating cities will be able to take advantage of the simple application process and low interest rate. Cities must demonstrate that the projects will save resources and money to repay the loan over the ten year term. Commitments to repay the loan would be secured through formal agreements. Extending the successful FRED program to King County cities will help to advance progress toward the shared, countywide goal of reducing community greenhouse gas emissions by 80% by 2050.

For example, a City may want to replace aging equipment but does not have a funding resource. The C-FRED enables installation of more efficient equipment that reduces energy and resource costs, freeing up savings that repay the loan. After the loan is paid off, all savings flow to the City.



Transfer Station Lighting

This FRED project funded the comprehensive retrofit of light fixtures to LED technology at the Algona, Enumclaw and Vashon (shown on the right) solid waste transfer stations. This project cost \$109K and received a \$50K utility rebate. With annual savings of 249,800 kWh and \$19,900, this project had a 2.9 year payback, far less than the 10+ year expected life of the new lights.



Roads Street Light Conversion

FRED funded the conversion of 676 high pressure sodium and metal halide fixtures to LED. This retrofit, costing \$34.6K and receiving a \$102K rebate, will save over \$45,000 annually, resulting in a 5 year payback. Over the 12 year estimated life of the new streetlights, net energy savings will be over \$26K, while maintenance costs will be reduced. Drivers will enjoy the bright, clear light!



Parks Division Solar Project

FRED funded the installation of 231 kW of solar on Parks' facilities: 135kW of solar at the King County Aquatic Center, 60kW at the Steve Cox Community Center (shown to the right), and 38 kW at Marymoor Park. This \$906K project cost was funded by solar grants of \$571K, with the rest supported by FRED. The panels save over \$31K in annual utility costs, resulting in a simple payback under 9 years.

