Administration and Finance - 2022

OFFICE OF SUSTAINABILITY

2022 CAMPUS ENERGY AND WATER USAGE

Purpose of Assessment

To analyze campus energy and water usage from 2018 through 2022

Sources of Campus Energy

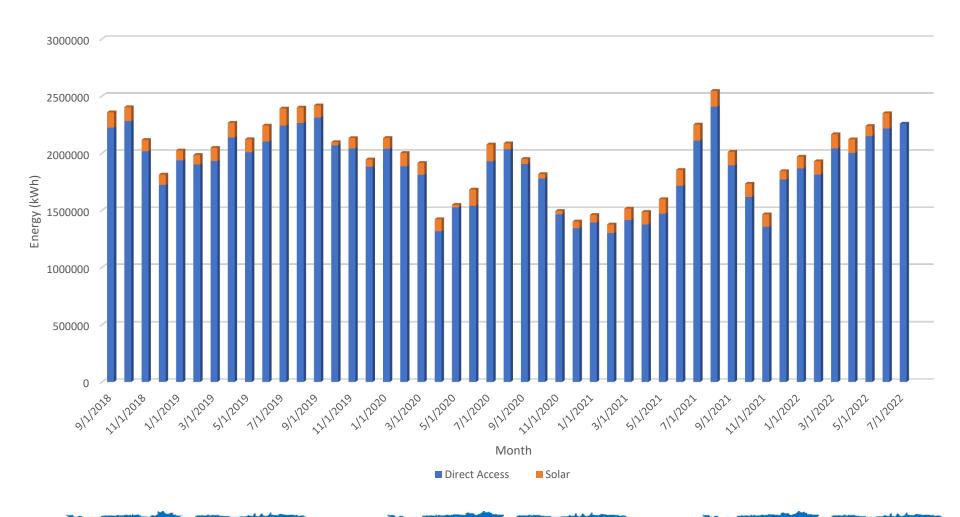
- Direct Access (DA)
 - Energy purchased directly from an energy provider
 - SoCal Edison (SCE) delivers energy we purchase through
 DA
 - Combination of fossil fuels and renewable sources

Solar

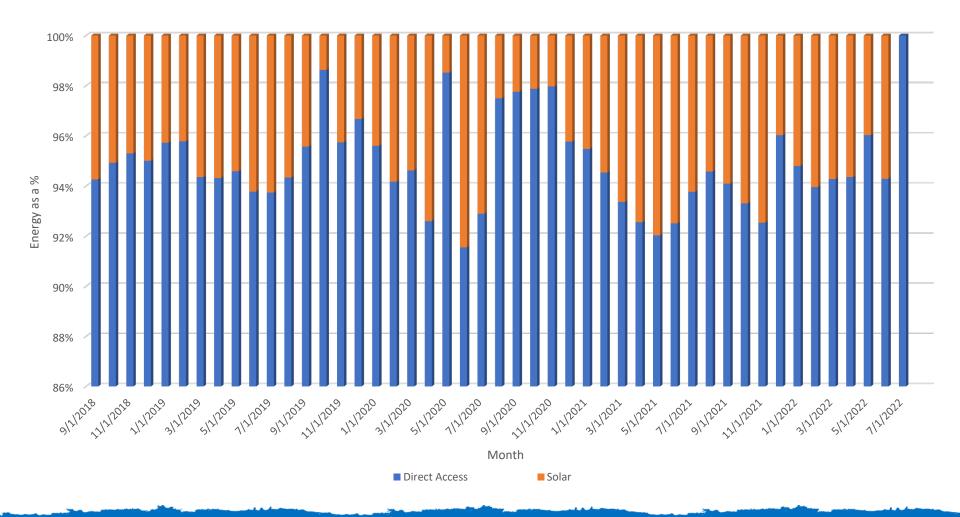
- Power Purchase Agreements (PPA)
- Vendor installs solar equipment and sells the energy to the campus
- Fixed rate and term of agreement
- Clean energy



Campus Energy Usage



Campus Energy – Usage Composition



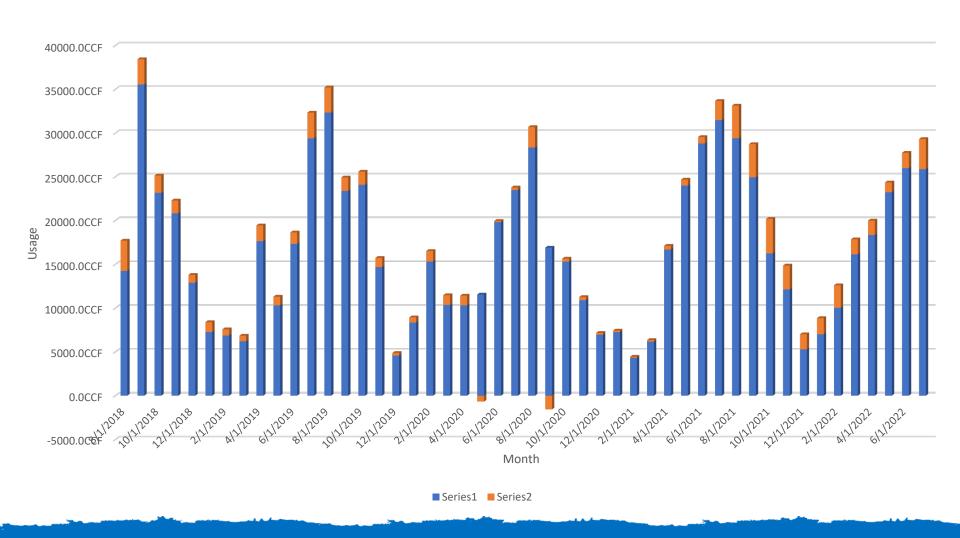
Campus Energy

- 572 kWh / month on average for a CA household
- 1,960,863 kWh / month CSUSB average
 - 3,428 average CA homes
- FY 21/22 slightly higher energy usage
 - SMSU North full operation
- Solar = 5-6% of total campus energy usage

Sources of Campus Water

- San Bernardino Municipal Water District (SBMWD)
 - Delivers potable water to campus
 - Used for traditional functions, landscaping and heating and cooling
- Irrigation Well
 - Non-potable water / reclaimed ground water
 - Used for irrigation only
 - Services campus athletic fields and portions of North
 Campus Circle

Campus Water Usage



Next Steps - Energy

- Improve energy metering
 - Repair / replace inaccurate energy meters
 - Install additional meters and integrate into Skyspark
- Upgrade building HVAC controls
- Double on-site renewable energy production
 - Additional 3.1MW (AC) solar
 - Additional 1 +/- MW (AC) battery

Next Steps - Water

- Improve water metering
 - Repair / replace water / sewer meters
 - Install additional meters at the building level and integrate into Skyspark
- Investigate turf removal projects
- Continue drought-tolerant landscaping practices
- Continue existing practice of using low-flow plumbing fixtures

Questions / Comments