

INSIGHTS FOR A COMPLETE GAME PLAN



INSIGHT #1 // ADVANCED ROOFTOP CONTROLS

Packaged Rooftop Units (RTUs) are everywhere and account for approximately 69% of the air conditioning in the United States. Due to their low first cost approach this class of equipment has often been overlooked from an efficiency standpoint and as a result accounts for over 1,000 Trillion BTUs of energy consumption. Advanced Rooftop Controls (ARCs) address this problem with a retrofit solution that brings modern energy conservation measures to these older units.

A qualifying ARC solution will provide energy savings by adding fan speed control and better utilization of the outside air. A typical RTU will run the supply fan at 100% speed whenever the building is occupied. By adding a variable frequency drive (VFD) the ARC takes a more dynamic approach matching the speed of the fan to the unit operation. The ARC will also take over economizer functions providing greater ability to pull additional air in from the outside when temperatures are low enough to cool the building without using mechanical cooling. Conversely, an ARC will use CO₂ to determine times of low occupancy when the ventilation load can be reduced saving energy by not having to heat extremely cold air or cool extremely hot air.

Pro Star's CATALYST is a best-in-class ARC retrofit that can not only reduce HVAC energy consumption by 30-60%, but also lower maintenance cost and extend RTU equipment life. This benefit is also commonly subsidized by incentives with over 240 utilities having ARC programs that cover up to 100% of the installation cost.

SOURCES PNNL, REL, PEAKPLUS, TRANE

- ✓ **Variable Speed Drive:** The Variable Frequency Drive (VFD) provides savings through supply fan control.
- ✓ **Advanced Economizer Control:** Reduces the compressor runtime to improve efficiency and reduce wear and tear.
- ✓ **CO₂-Based Demand Control Ventilation:** Makes the most of the available outside air for cooling while ensuring proper ventilation.
- ✓ **It's more than a drive:** Providing a solution that provides equipment protection and serviceability.



INSIGHT #2 // CA STATE SENATE PASSES CORPORATE GHG EMISSION REPORTING STANDARDS

On 1/26/2022, the California state senate passed a law that would require U.S. based companies that generate greater than \$1bn annually and conduct business in CA to disclose their greenhouse gas (GHG) emissions. The law, which was part of the Climate Corporate Accountability Act, overwhelmingly passed the senate last week and now moves onto the Assembly for their approval.

The bill would require companies to disclose their complete GHG emissions across all three defined phases of their business, namely Scope 1, Scope 2, and Scope 3 emissions, which include direct emissions, emissions from purchasing and using electricity, and indirect emissions, such as a corporation's supply chain.

While the bill would alleviate small and medium businesses (SMBs) from reporting their standards to the Air Resources Board, the current law as it stands would still require SMBs to report up the supply chain if they are doing business with any corporates that would be subject to the regulation.

Although the SB-260 law has yet to be signed into law by the CA governor, it would be a first-in-the-nation government-defined regulation for specific disclosure requirements for corporate entities, and could lead to similar regulations by other states and jurisdictions across the U.S.

SOURCES: WASHINGTON EXAMINER