In an effort to reduce the methane emissions footprint in midstream compression station applications, Solar Turbines and Williams have commissioned a process vent recompression system at two different stations. Both stations operate two Titan™ 130 gas turbines driving C75 compressors.

When depressurization of the turbomachinery package is required, the gas that would originally be vented is reinjected into the suction header of the station. The station can capture between 92-95% of the process gas prior to venting. This equates to 35 tonnes of CO2e per venting event. In addition, the equipment achieved a low noise level, compliant with the station’s noise requirements.

The recompression system communicates to each turbine at the site through a dedicated control system which monitors the process compression system performance and amount of natural gas mitigated to the atmospheric vent. The system can be sized to be depressurized in as little as eight hours.