Monitor and Reduce Hydrocarbon Environmental Footprints

energy components

Software's Role in the Energy Transition

As the world plans for a lower-carbon future, new requirements and regulations are emerging to drive more control of emissions and environmental contribution. Emission monitoring is critical not only for reporting but also for benchmarking mitigations and effectiveness of measures implemented. Energy Components was created as a plug-in to monitor hydrocarbon accounting and Greenhouse gas (GHG) calculations.

What Energy Components Offers

Emission Factors, CO2 Equivalent and Emissions

Energy Components can calculate emission factors from component analysis or use industry standard emission factors. It can also convert between energy and volume emission factors for use in emission calculations.

Automating Emissions Calculations

Production data is managed in Energy Components and provides input for emission calculations. Emission calculations can be included in allocation network models or as separate calculations to run when production data is updated. Emission calculations extracts volume or energy from representative flare, venting, leakage, and fuel, as well as representative hydrocarbon composition. Connecting allocation calculation and emission allows for emission results to be fully automated.

Data Quality, Validations, and Approvals

Energy Components enables data validation, data locking, revisions, and approvals. All calculated emissions can be traced and verified from input data through formulas with validations, revisions, and approvals flows. Thus, making emission results easily auditable for reviewing data and results.

quorum software

Quickly get started with pre-configured and customizable emission calculations from the calculation library in Energy Components.
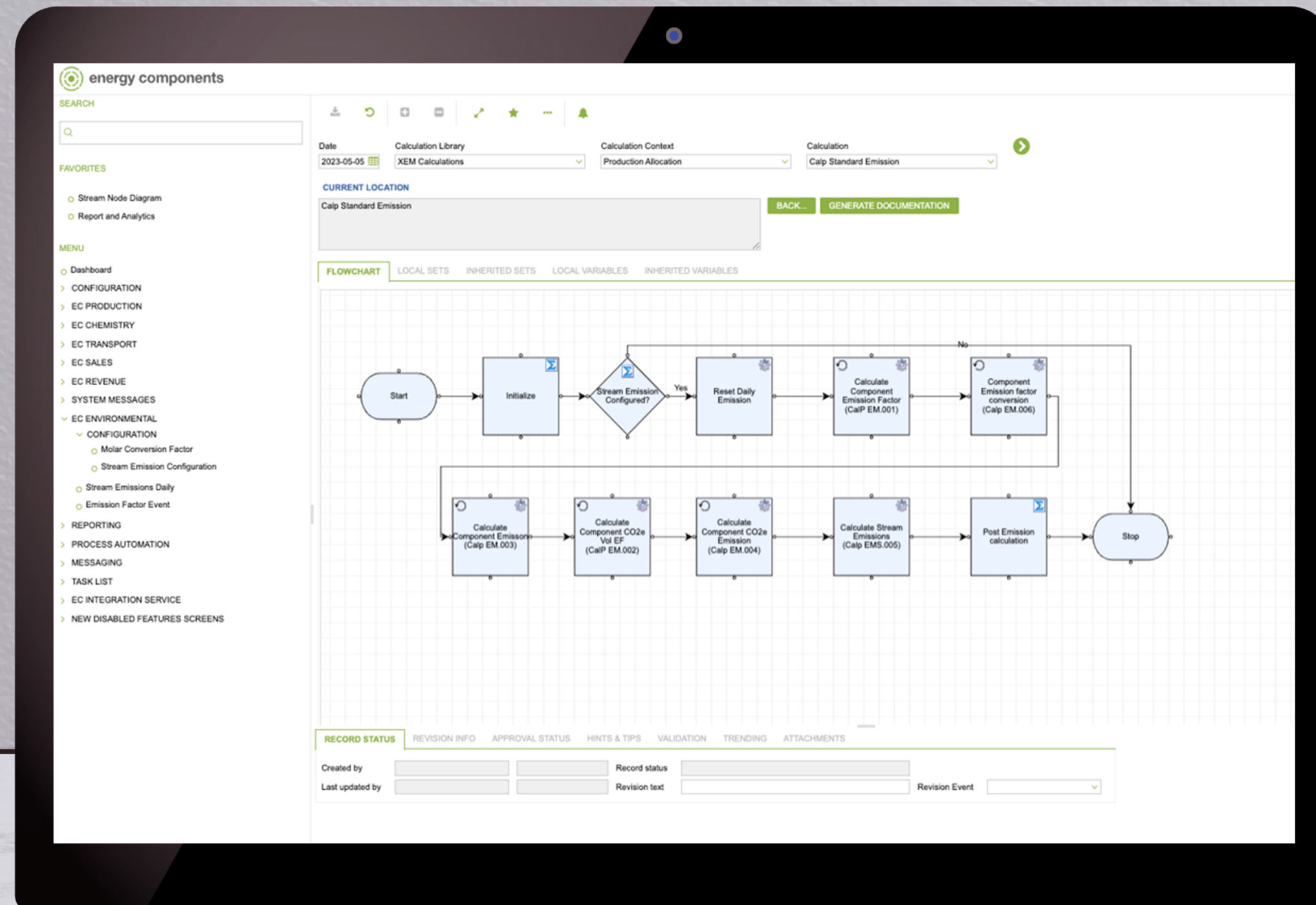
GHG Calculation Library

Energy Components Environmental includes a library with standard calculations derived from IPCC, GHG Protocol, API that also can be expanded with custom calculations. System administrators and super users can also create their own library calculations and replace the out-of-the-box calculations or use new calculations as more will be added to the library in the future.

Visualize and Monitor Emissions

With Energy Components Reporting and Analytics Emission status, totals and emission trends can be viewed in custom dashboards. These dashboards can be tailor-made to fit any organizational requirement for monitoring emissions. Dashboards and reports includes drill-down and drill-through to view emissions by location and categories such as scope 1, scope 2 and scope 3 emissions.

Continuous Emission Monitoring and Predictive Emission Monitoring

Energy Components Environmental supports CEMS (Continuous Emission Monitoring systems) converting measurement to emission, and with a customizable library of pre-configured calculations for PEMS (Predictive Emission Monitoring).