Tracking and Reporting Greenhouse Gas Performance

The SkySpark GhG App

SkyFoundry

Introduction

Corporate and government interest and support for sustainability and "ESG" related policies (Environmental Social and Governance) is growing across all segments of the CRE industry. ESG issues are increasingly seen by shareholders as an indicator of a company's future success and are now a core component of most annual reports by public companies.

Key elements of the "E" portion include energy efficiency initiatives, and **Greenhouse Gas** Emission tracking and reporting. Adding the capability to calculate, track and report GhG metrics in SkySpark® is a logical extension of our continually growing suite of energy focused applications.

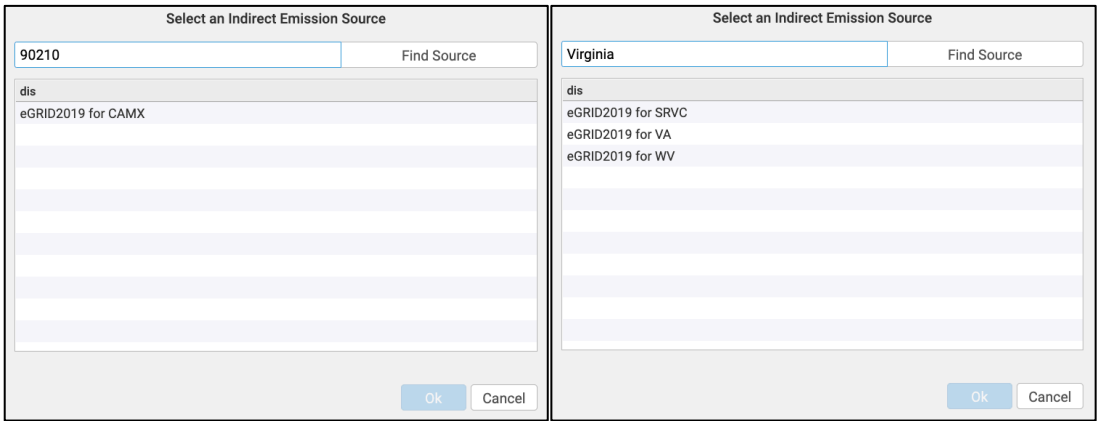
SkySpark's GhG App

The SkySpark GhG App allows the creation of Emission Sources so that Greenhouse Gas Emissions can be easily calculated from energy consumption data acquired and stored in SkySpark. An Emission Source is configured with one or more Emission Factors to calculate each individual Greenhouse Gas Emission.

The SkySpark GhG App allows the user to lookup Emission Source data published by government agencies, such as the US EPA, to simplify the configuration of location specific Emission Factors to make the most accurate calculation. It directly addresses Scope 1 and Scope 2 GhG emissions.

Concept of Operation:

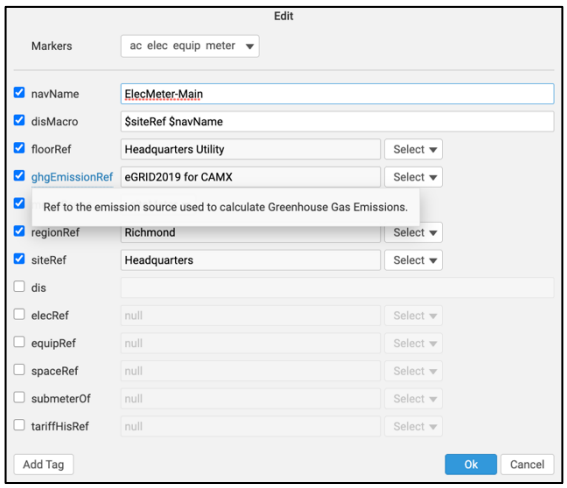
The setup process starts by creating an emission source, which is either the source of purchased electricity (indirect emission source) or the type of fuel used in an onsite combustion process (direct emission source).



SkySpark simplifies this process by allowing users to search for online sources published by government agencies. These online resources provide GhG conversion factors based on location or fuel type. Examples include:

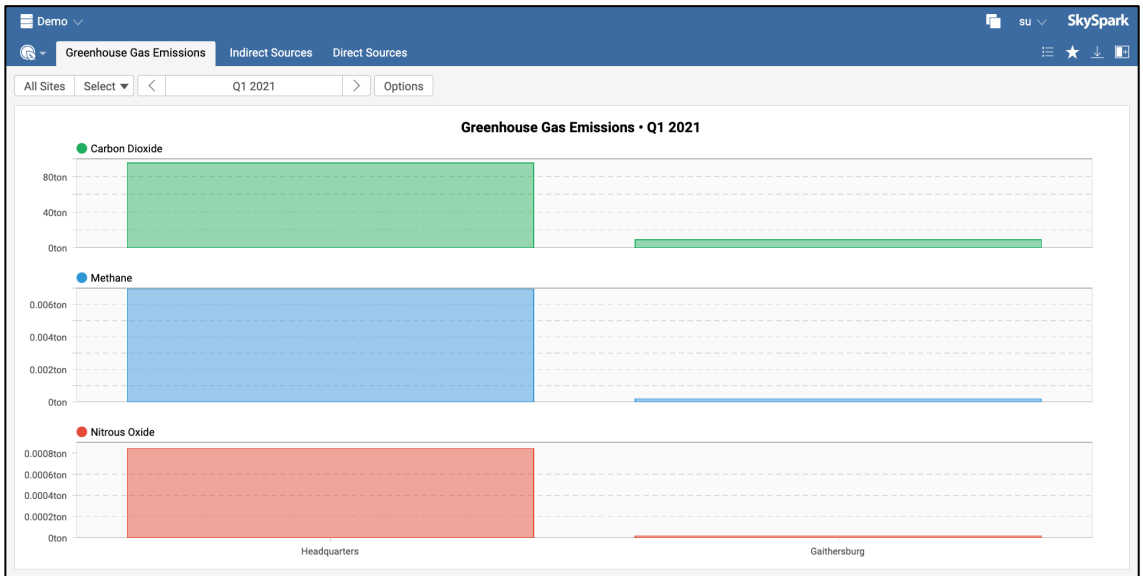
- US EPA Emissions & Generation Resource Integrated Database (eGrid) for individual eGrid subregions (searchable via zip code) or individual states/territories
- US EPA Emission Factors Hub for Natural Gas and Propane

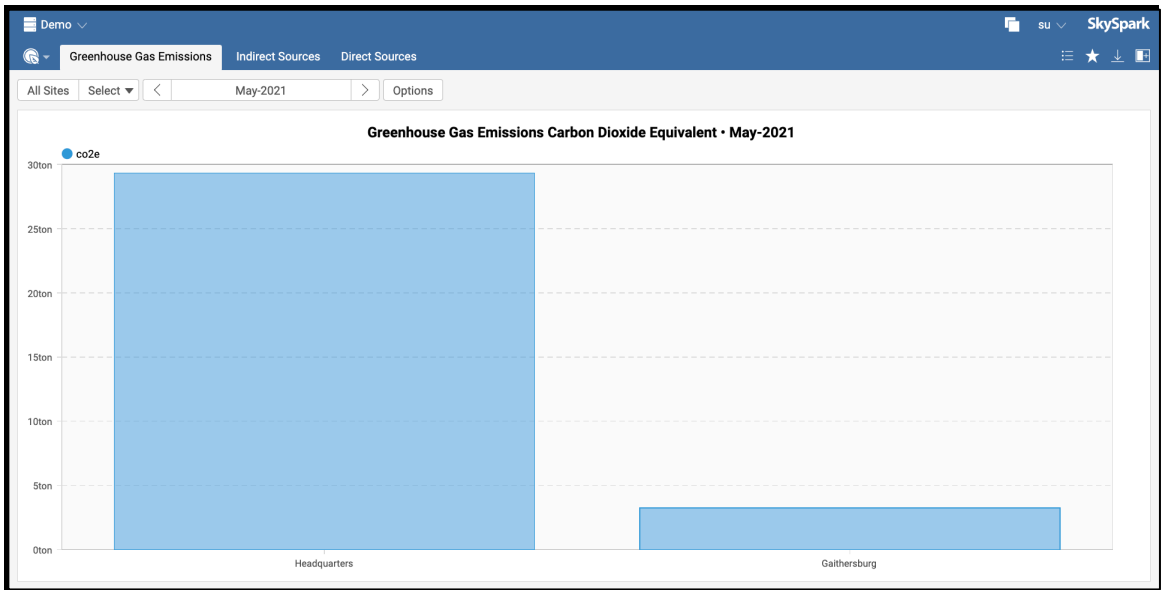
And, if a source for a specific location or fuel type is not available via an online resource, an emission source and conversion factors can be created manually. Once an emissions source is created, it is easily associated with the device that measures consumption data, such as an electricity meter or gas meter.



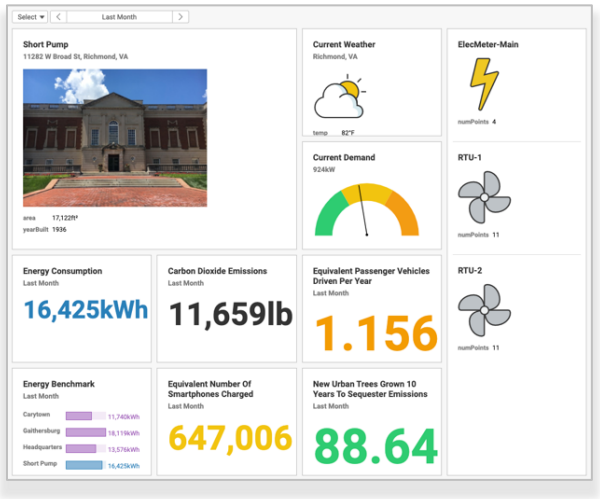
GhG Views and Reports

The GhG App provides a built-in, auto-generated view to display calculated Greenhouse Gas Emissions based on the emission sources and allows GhG emissions to be displayed for one individual or groups of sites. The view provides customization options to easily change how the GhG information is presented, such as showing individual GhG emissions or the Carbon Dioxide Equivalent and the display unit.





Additionally, a convenience function allows SkySpark developers to calculate Greenhouse Gas Emission values for display in their own custom Views outside of the GhG App.



Representation of GhG values in other "societal" units

In the practice of GhG reporting, GhG emissions are often represented in units that are more understandable to the lay person (cars, trees, etc.). Some examples that of Ghg equivalent values included out of the box include:

- Passenger Vehicles Driven Per Year
- Gallons of Gasoline Consumed
- Propane Cylinders Used For Home BBQ
- Number Of Urban Tree Seedlings Grown For 10 Years
- Number Of Smartphones Charged

Fully Integrated with SkySpark Features and Tools

The GhG App is a fully integrated SkySpark application providing the same navigation options, presentation formats and reporting features as seen across all SkySpark Apps.

Note: SkySpark® Maintenance is required to be active for access to online GhG conversion factor services and operation of the GhG Extension and App.

ABOUT SKYFOUNDRY

SkyFoundry's mission is to provide software solutions for the age of "the Internet of things". Areas of focus include:

- Building automation and facility management
- Energy management, utility data analytics
- Remote device and equipment monitoring
- Asset management

SkyFoundry products help customers derive value from their investments in smart systems. Contact us to learn more.

https://skyfoundry.com/

info@skyfoundry.com

SkyFoundry