

# **2021** GHG INVENTORY SUMMARY REPORT

**PREPARED: MARCH 2022** 



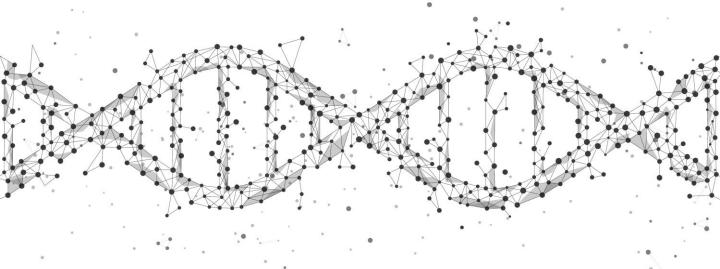


# **2021** GHG INVENTORY SUMMARY REPORT

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Fulgent Genetics is committed to measuring, understanding and reducing its carbon footprint in order to improve energy and greenhouse gas (GHG) efficiency. Climate change is a critical challenge to business and society and as a responsible company, Fulgent has made it a priority to strategically address GHG emissions. Conducting a detailed accounting of GHG sources and emissions throughout the company's operations is a critical step to better understand the impact, inform the GHG strategy and track progress towards goals.





# **ABOUT THIS REPORT:**

This report summarizes the results of Fulgent's 2021 GHG inventory. This is the inaugural GHG inventory for Fulgent and the results will serve as the baseline against which improvements and progress towards certain emission reduction targets will be measured. Fulgent will continue to measure its GHG emissions and publish the results on an annual basis.

This inventory was conducted by a third-party consultant in accordance with the GHG Protocol Corporate Accounting and Reporting Standard and Scope 2 Guidance. We have adopted the operational control approach, excluding entities where Fulgent retains less than 50% interest, as well as holding companies and entities with no physical offices. The operational boundaries of this inventory include the following entities:

Fulgent Therapeutics (USA)

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- CSI (USA)
- Fujian Fujun Gene Biotech Co., Ltd. (China)<sup>2</sup>

The GHG emissions assessed in this report include carbon dioxide (CO2), methane (CH4), nitrous oxide, (N2O) and hydrofluorocarbons (HFCs). Non-CO2 GHGs were converted to CO2 equivalent (CO2e) based on the global warming potentials (GWPs) published in the <a href="Intergovernmental Panel on Climate Change">Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5)</a>.

<sup>1.</sup> External data verification/assurance has not been conducted, however, the need for data assurance will be periodically reassessed.

<sup>2.</sup> Fujian Fujun Gene Biotech Co., Ltd. is a joint venture formed in China where the Company acquired a controlling financial interest in May 2021.

### **SOURCES AND SCOPES:**



Fulgent's sources of GHG emissions are outlined below. All Scope 1 and 2 emission sources of which Fulgent has operational control, have been identified and included in the inventory. Scope 3 emissions are optional under the GHG Protocol. Fulgent did not include Scope 3 emissions in the initial inventory but will reassess its materiality in the future.

### Scope 1

- Mobile Combustion (Company Road Vehicles)
  - Gasoline
  - Diesel
- Stationary Combustion
  - Natural Gas
  - Distillate Fuel Oil
  - Bio-based Fuel
  - Propane

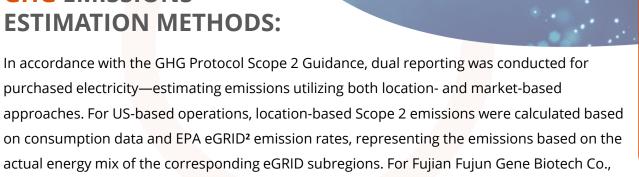
# Scope 2

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**Purchased Electricity** 

- Mobile Combustion (Company Aircraft)
  - Jet Fuel
- Refrigerants





Ltd.'s operations, national emissions factors were used from the International Energy Agency. 3 In addition to location-based calculations, Scope 2 emissions were calculated and disclosed separately using the market-based approach, using Green-e® Residual Mix Emissions Rates<sup>4</sup> for the USA locations, which account for renewable energy that has already been sold and accounted for by specific consumers.

Emissions for stationary and mobile combustion were based on EPA Emission Factors for Greenhouse Gas Inventories (April 2021).

Where actual electrical consumption data was unavailable, Commercial Buildings Energy Consumption Survey (CBECS)<sup>5</sup> data was used to estimate consumption. Where full year data was not available, YTD data was annualized to estimate full year consumption.

**GHG EMISSIONS** 

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<sup>2.</sup> US: Year 2019 eGRID Subregion Emission Factors

<sup>3.</sup> https://iea.blob.core.windows.net/assets/eb3b2e8d-28e0-47fd-a8ba-160f7ed42bc3/CO2 Emissions from Fuel Combustion 2019 Highlights.pdf

<sup>4.</sup> https://www.green-e.org/residual-mix

<sup>5.</sup> https://www.eia.gov/consumption/commercial/data/2012/ (Table C15). Estimated facilities: FT-ATL01, FT-Puente01 and FT-HOU03.



#### **GHG MANAGEMENT APPROACH:**

Fulgent's GHG management approach currently focuses on optimizing energy conservation through facility upgrades such as LED lighting, low-E grade glass windows and occupancy and daylight sensors. Fulgent's COVID-19 testing & vaccine vans are equipped with solar PV panels that provide them with clean renewable energy and reduces consumption from the grid. The company is currently considering assessing several locations for onsite solar energy potential and will continue to assess opportunities to optimize energy efficiency while reducing operational costs.

Moving forward, the purchase and retiring of carbon offsets to support the company's climate commitments will also be considered.

The GHG inventory results will add valuable clarity to Fulgent's energy performance and GHG impacts and help strategically guide the company's future energy and climate initiatives.

#### **SUMMARY OF RESULTS:**

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In 2021, Fulgent's Scope 1 and 2 GHG emissions totaled 3,101 mtCO2e, which consisted of 1,651 mtCO2e of Scope 1 emissions and 1,450 mtCO2e of Scope 2 emissions. § Scope 1 purchased electricity and Scope 2 mobile combustion were the most significant sources. A breakdown of emissions per GHG is exhibited in the table below.

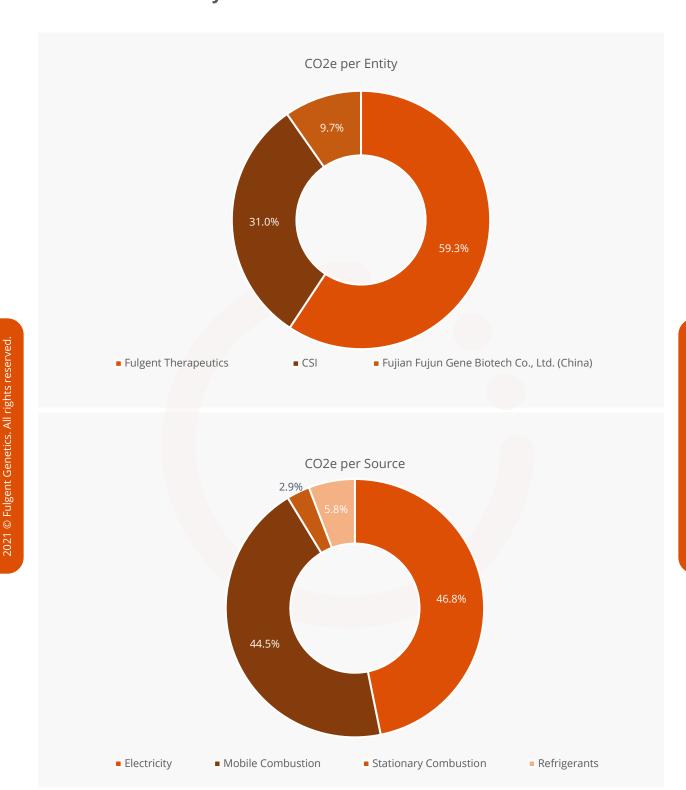
GHG	Total Tons	mtCO2e
CO2	2,899	2,899
CH4	0.14	4.04
N2O	0.07	17.31
R-407C	0.01	18.42
R-410A	0.08	162.32

Due to the scale of their operations, Fulgent Therapeutics and CSI were the largest emitting entities.

The company's overall GHG intensity in 2021 was 0.0161 mtCO2e/sf.



## Breakdowns Of GHG Emission Per Entity And Per Source Are Exhibited Below.



In 2021, 46.8% of the company's carbon footprint was from purchased electricity and 44.5% was from mobile combustion. 7 90.3% of GHG emissions were from US operations, while 9.7% were from Fujian Fujian Fujian Gene Biotech Co., Ltd.'s operations in China. In 2021, Fulgent facilities consumed an estimated total of 4,019,034 kWh of electricity. Overall, the electrical intensity was 20.8 kWh/sf.

<sup>7.</sup> Percentages are based on location-based calculations. However, market-based calculations can also be found in the inventory spreadsheet.

Going forward, the company will be focusing on improving energy and GHG intensity relative to square footage. The GHG intensity for electrical consumption is exhibited per facility in the figure below. The most GHG intensive facilities are Temple City, CA, Houston, TX and Alpharetta, GA, due to the energy required for laboratory operations, as well as the presence of several mobile laboratories. Improving the efficiency of these facilities represents a significant opportunity to improve the company's overall footprint.

Emissions from Fulgent's corporate aircraft account for 41% of total emissions and 93% of mobile combustion emissions, however much of these emissions are from chartering the company aircraft to third parties.

### **LOOKING FORWARD:**

Fulgent is committed to continually improving its carbon footprint over time through opportunities such as energy optimization, carbon offsets and potentially renewable energy either generated onsite or purchased through contractual instruments (e.g., renewable energy certificates).

The next step of the company's low-carbon transition is to set ambitious targets that align with the scientific consensus of the IPCC. As such, the company intends to have those targets validated by the Science Based Target Initiative (SBTi). Progress towards those targets will be measured and disclosed annually relative to the 2021 baseline set by this GHG inventory.

GHG reduction targets will be based on intensity metrics, rather than absolute emissions, to allow the operations to grow, while still continually improving performance and eventually achieving carbon neutrality.

After the GHG targets have been set, the company operations will be assessed for specific opportunities to improve overall energy and GHG performance.

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