# MONITOR AND MEASURE GASES THAT CONTRIBUTE TO CLIMATE CHANGE

### The Measure of Confidence



Fossil fuel consumption increases the concentration of Greenhouse Gases (GHGs) – such as carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), and nitrous oxide ( $N_2O$ ) – in the Earth's atmosphere. These gases trap heat, thereby affecting our planet's temperature.

To help fight climate change caused by increased concentrations of atmospheric GHGs, regulatory institutions – such as the EPA and CEN – have implemented "Green Initiatives" that demand continuous measurement and inventory.

# Reliably characterize the composition of GHG emissions immediately after installation

Based on Agilent 7890B GC system, **Agilent GHG Analyzers** are factory-configured and chemically tested to help you track GHG emissions. Available in both standard and custom configurations, these analyzers conform to regulatory norms to facilitate your monitoring requirements.



## Agilent Greenhouse Gas Analyzers include innovative technology and reflect our stringent quality control process. Systems include:

### Factory

- · System setup and leak testing
- · Instrument checkout
- · Installation of appropriate columns
- · Factory-run checkout method using application checkout mix

### Delivery

- Instrument manual for running the method
- CD-ROM with method parameters and checkout data files for easy out-of-the-box operation
- Application related consumables included no separate ordering required
- · Easy consumables re-ordering information

### Installation

- Duplicate factory checkout with checkout sample onsite by factory-trained support engineer
- · Optional application startup assistance



## **Agilent Technologies**

### Perform simultaneous analysis of Greenhouse Gas emission composition using these built-in features:

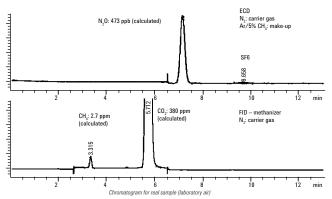
- **Pre-configuration and chemical testing** ensures optimal performance for sub-ppm to %-level GHG analysis.
- Specific detectors ensure trace-level detection of N<sub>2</sub>O.
- Optional third TCD detector expands the range of concentration for detecting CO<sub>2</sub>.
- Optimized Retention Time Locked (RTL) acquisition method, Application Note, and quick-start guide facilitate rapid deployment.
- Column, consumables, calibration/checkout samples, and analytical GHG method reduce the time needed for start-up and chromatographic performance verification.

#### **Ordering information:**

Part Number	Configured per	Target Analytes
G3445 Series #561	Greenhouse Gas Analyzer ( $CO_2$ to 0.4 ppm to 20%)	$\mathrm{CH}_{\mathrm{4}},\mathrm{N}_{2}\mathrm{O},\mathrm{CO}_{2}$
G3445 Series #563	Greenhouse Gas Analyzer ( $\rm CO_2$ to 0.4 ppm to 0.20%)	CH <sub>4</sub> , N <sub>2</sub> O, CO <sub>2</sub>
G3445 Series #562	Greenhouse Gas Analyzer ( $CO_2$ to 50 ppm to 0.20%)	CH <sub>4</sub> , N <sub>2</sub> O, CO <sub>2</sub>

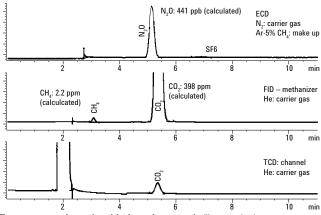
# Boost your GHG monitoring productivity and produce reproducible data... day in and day out

### Greenhouse Gas Chromatography – Three Detector Channels (G3445 Series #561)



**Micro-ECD sensitivity enables N<sub>2</sub>O detection at PPB levels.** An easy-to-use union based on Capillary Flow Technology connects the valves and Micro-ECD to improve chromatographic performance. You can easily expand this configuration to include SF<sub>6</sub> determination.

### Greenhouse Gas Chromatography – Three Detector Channels (G3445 Series #562)



**Two separate channels with three detectors** facilitate method setup, promote faster results, and reduce critical nature timing for valve switching. A third TCD expands the concentration range for  $CO_2$  determination.

### Put your applications on the fast track

Contact your local Agilent Representative or Agilent Authorized Distributor at **agilent.com/chem/contactus** 

Or call 800-227-9770 (in the U.S. or Canada)

Visit **agilent.com/chem/appkits** for a description of available Analyzers and Application Kits

This information is subject to change without notice.

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