

# CLIMATE-CONSCIOUS CLOUD COMPUTING

How TrueCarbon Helps You Meet Your Sustainability Goals



#### **ACHIEVING IMPROVED SUSTAINABILITY**

#### Calculating IT CO<sub>2</sub> emissions is complicated

TrueCarbon makes it easy to accurately calculate your cloud carbon emissions, helping you understand the exact causes and amounts of emissions.

#### Cloud workloads and their energy demands constantly fluctuate

TrueCarbon tracks fluctuations via real-time data capture, providing instant reporting and automated actions.

#### With the CO<sub>2</sub> clock ticking, you need to meet your sustainability targets

Achieve your emissions goals with TrueCarbon by executing Al-driven recommendations.

#### Other cloud optimization products primarily focus on reporting and calculations

Go beyond simple reporting of cloud  $CO_2$  emissions. The TrueCarbon platform enables your organization to continuously optimize, reducing both your costs and carbon footprint.



Cirrus Nexus empowers organizations to achieve more sustainable cloud computing through Al-driven recommendations to reduce carbon consumption and optimize cloud spend. Our flagship product TrueCarbon is a unified platform that provides an integrated view of your IT footprint across all your hosting environments, including cloud, on-premises, and hybrid. Assigning a cost to carbon provides your organization with visibility into its carbon emissions and environmental impact. Not only does this drive workload changes to meet sustainability goals, but this also fosters a business shift toward more sustainable infrastructure.

TrueCarbon factors in variables such as energy source composition, power consumption, IT system utilization rates, and environmental variables to provide organizations with clear CO<sub>2</sub> emissions measures throughout the life cycle of the IT system.

The result: Real-time, geo-specific, actionable, reportable, transparent, and achievable CO2 targets



# **HOW IT WORKS**



TrueCarbon calculates and analyzes your cloud carbon footprint





Continuous, adaptive changes optimize usage







Your organization is empowered to reduce its cloud carbon footprint.



Reports reveal insights and inefficiencies





Automated changes reduce emissions







# TrueCarbon calculates and analyzes your cloud carbon footprint with information such as:



Your workload metadata and usage metrics



Governance policies, data center region availability, and carbon costs



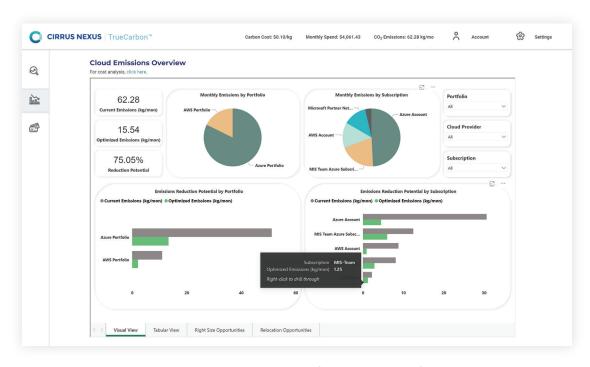
#### **Your Data Centers (Public and Private)**

Power usage effectiveness (PUE), location, on-site energy generation, available workload configurations (on-premises and public or private cloud), and underlying hardware



Carbon intensity of electricity consumed in different regions based on the composition of energy sources consumed at different times (i.e., the percentage of energy that comes from coal, oil, gas, and renewables)

# With all this data, TrueCarbon calculates your entire cloud environment's footprint and the emissions caused by each workload, down to the minute.



TrueCarbon provides a breakdown of your cloud carbon footprint.





## Reports reveal insights and inefficiencies.

- TrueCarbon's interactive reporting tools provide insights on the direct emissions associated with your application workloads.
- Request custom reports from Cirrus Nexus's business analytics and visualization specialists.



## Automated changes reduce emissions.

- TrueCarbon's Al identifies the best way to improve your carbon footprint by finding inefficiencies and recommending changes. Recommendations include rightsizing deployments, removing unused resources, and relocating workloads to other data centers based on carbon intensity and clean power requirements.
- You pick the changes you want, and TrueCarbon executes them for you.
- TrueCarbon also integrates with ServiceNow to leverage existing workflows, processes, and notifications.



# Continuous, adaptive changes optimize usage.

- TrueCarbon continuously adjusts cloud workload configurations to match usage trends based on customer-defined carbon and cost efficiency parameters. Inefficiencies are continuously identified through pattern analysis, and dynamic changes can be automatically implemented.
- TrueCarbon can automatically identify changes in usage patterns and dynamically apply the most optimal settings.



## Your organization is empowered to reduce its carbon footprint.

• You can implement TrueCarbon's recommendations through the portal, integrate via ServiceNow, or fully automate optimization with TrueCarbon's AI within defined parameters you set.



# **FAQ**

# Is TrueCarbon right for me?

TrueCarbon helps organizations control their cloud spend and cloud emissions. It is simple, customizable, and cloud provider-agnostic. As pressure for more rigorous emissions reporting and regulation increases, TrueCarbon helps you get ahead of the curve by measuring your organization's carbon footprint.

#### What types of cloud infrastructure configurations does TrueCarbon support?

TrueCarbon works for public cloud environments such as AWS, Google, and Azure; on-premises cloud configurations; or hybrid combinations. Designed to seamlessly work across multiple cloud providers and private data centers, TrueCarbon provides an unbiased, customer-centric solution.

#### Where does this data come from?

TrueCarbon aggregates data related to electricity production, transmission, and consumption data collected from multiple sources. TrueCarbon collects usage data such as utilization statistics and workload performance patterns. This data is then analyzed by our proprietary AI technology to determine the most optimized way to run workloads.

#### How does TrueCarbon calculate carbon emissions?

TrueCarbon calculates near real-time emissions based on 3 distinct factors:

- Electricity consumption based on a workload's configuration, metadata, and usage, as well as overhead power consumption;
- 2. The composition of electricity sources powering a workload based on the workload's data center type and region; and
- 3. Carbon intensity coefficients from the IPCC to convert electricity consumption into carbon emissions.

#### How do I get started with TrueCarbon?

TrueCarbon can be deployed via your ServiceNow instance or directly on the TrueCarbon portal. Once deployed and linked to your IT environments, it immediately starts capturing the relevant data and generates insights within minutes. Over time, as the TrueCarbon AI learns your organizational usage patterns, the results become increasingly fine-tuned.

#### Does Cirrus Nexus offer additional support for TrueCarbon implementation?

**Cirrus Nexus Advisory** delivers value-add services through data analysis, cloud migration monitoring, sustainability planning workshops, and implementation of intelligent workload optimization.



#### Does TrueCarbon take into account carbon offsetting used by public cloud providers?

Cirrus Nexus is committed to providing a true account of carbon emission production, so offsets are not included in calculations. Moreover, using TrueCarbon will reduce the amount of emissions produced by your IT system, thus reducing the need for carbon offsets.

#### How is TrueCarbon different from TrueSpend?

TrueCarbon and TrueSpend are independent products. However, they complement each other to help organizations optimize their cloud operations for both cost and carbon. TrueSpend is an Al-powered cloud optimization tool that makes it easier to control, automate, and reduce cloud spend, offering cost-saving recommendations. Combining both TrueCarbon and TrueSpend will take your cloud optimization to the next level.

#### How much does TrueCarbon cost?

Pricing varies based on the complexity and configurations of cloud environments. For more information, schedule a product demo at www.cirrus-nexus.com/schedule-demo or by emailing sales@cirrus-nexus.com.

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Start meeting your sustainability goals with TrueCarbon.

Schedule a demo today to see TrueCarbon in action.