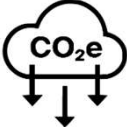



IAITAM ACE 2025

ITAM - Another Brick In The Wall

How to Measure **and** Lower
Your IT Asset Carbon Footprint





1



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2

Vocabulary


Asset = CI (Configuration Item)

Asset Repository = CMDB (Configuration Management Database)


ESG = Environmental, Social, and Governance

Sustainability = "Meeting the needs of the present without compromising the ability of future generations to meet their own needs" - United Nations 1987

C02e = Carbon Dioxide Equivalents



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3

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BITRASER®

IT Asset Managers' Key Role in Achieving ESG Goals

ITAMs Role in Achieving ESG Goals



BitRaser

The principles of ESG (Environmental, Social, and Governance), as we know them today, were developed during the early 2000s, building upon a foundation that is decades, maybe even centuries old. ESG has evolved from older historical frameworks like EHS (Environment, Health, and Safety), CSR (Corporate Social Responsibility) that focused on health and safety issues, pollution reduction, and corporate philanthropy & initiatives like GRI (Global Reporting Initiative), UNGC (United Nations Global Compact) that is a voluntary initiative for businesses and firms to adopt sustainable and socially responsible policies and practices like SRI (Socially Responsible Investing). The adoption of the ESG movement by businesses and society at large has gained significant momentum in recent years, driven primarily by factors such as environmental concerns, social expectations, investor demands, regulatory mandates, organizational reputation, and long-term sustainability.




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7

Gartner

"The IT function cannot afford to be bystanders to environmental sustainability."



2023 Gartner Sustainable IT Opportunities Survey:
IT-related emissions account for nearly one-quarter (24%) of total organization greenhouse gas (GHG) emissions, on average, with higher proportions typical in technology and financial services industries.



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8

What is C02e?


Carbon Dioxide Equivalents

Other Greenhouse Gases

A Measurement of Impact

Equivalent of Carbon Dioxide

Includes All GHG emissions



SF₆ = Sulfur Hexafluoride

N₂O = Nitrous Oxide


HFC₄ = Hydrofluorocarbons

CH₄ = Methane

CO₂ = Carbon Dioxide

PFCs = Perfluorochemicals

C02 ≠ C02e



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9

Cost Savings


Regulatory Compliance

Enhanced Reputation

Increased Efficiency

Access to New Markets

Why Measure CO2e?




Employee Engagement

Risk Management

Innovation


Competitiveness

Builds Culture



Lower CO2e means a healthier planet and enhanced financial performance.

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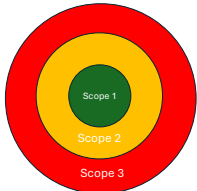



10

Scope 1
Direct emissions from sources owned or controlled by the company. Examples include burning fuel in company vehicles or boilers.

Scope 2
Indirect emissions from purchased energy, such as electricity, steam, heating, and cooling. The company is indirectly responsible for these emissions because it uses the energy.


Scope 3
Indirect emissions from activities that occur in the company's value chain. Includes emissions from extracting and producing materials, transporting fuels, and customers' use and disposal of products.






How is CO2e Measured?

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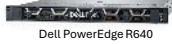


11

 **PowerEdge R640**

This product's estimated carbon footprint:

7730 kgCO2e *



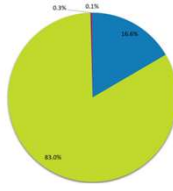
Dell PowerEdge R640

■ Manufacturing


■ Use

■ Transportation

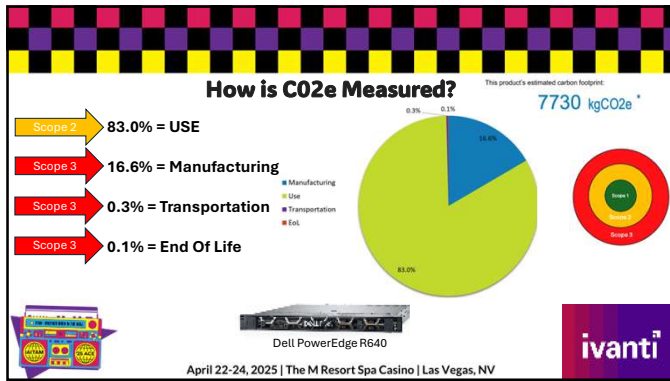
■ End.



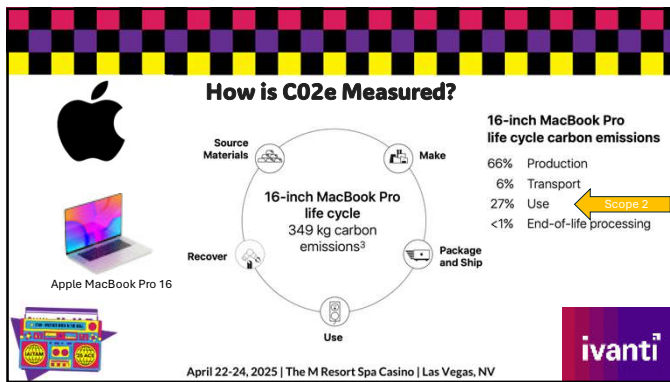
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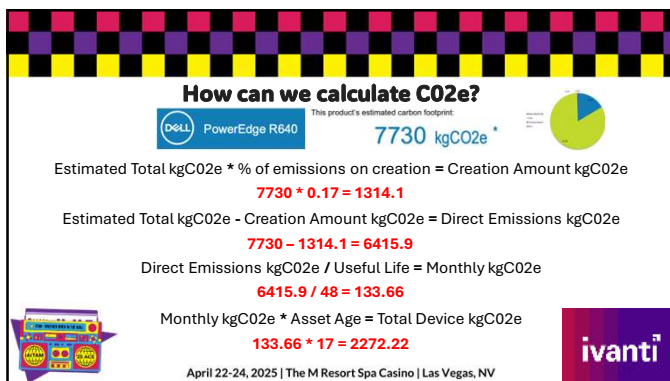
12




13




14



15



Apple MacBook Pro 16



349 kg carbon emissions³

16-inch MacBook Pro
life cycle carbon emissions

- 66% Production
- 6% Transport
- 22% Use
- <1% End-of-life processing

Estimated Total kgCO₂e * % of emissions on creation = Creation Amount kgCO₂e

349 * 0.73 = 254.77

Estimated Total kgCO₂e - Creation Amount kgCO₂e = Direct Emissions kgCO₂e


349 - 254.77 = 94.2

Direct Emissions kgCO₂e / Useful Life = Monthly kgCO₂e


94.2 / 36 = 2.62

Monthly kgCO₂e * Asset Age = Total Device kgCO₂e

2.62 * 17 = 44.54



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16

NEW SAVE CHECK IN ASSIGN USER ASSIGN LOCATION ASSIGN FINANCIAL OWNER TRANSFER STOCK


Asset - Computer - Server - CHI-WIN-CTR1X4

ASSET SUMMARY

Name * CHI-WIN-CTR1X4

Asset Tag 5447585

Serial Number * 938547382



DETAILS DISCOVERY LICENSABLE SOFTWARE (0) INSTALLED SOFTWARE (0) CARBON FOOTPRINT NETWORK (0) INCIDENTS (0) SUP

Mfg Est Total kgCO ₂ e	7730	*	% of emission on creation	17	=	Creation Amount kgCO ₂ e	1314.1
Mfg Est Total kgCO ₂ e	7730	-	Creation Amount kgCO ₂ e	1314.1	=	Direct Emissions kgCO ₂ e	6415.9
Direct Emissions kgCO ₂ e	6415.9	/	Useful Life	48	=	Monthly kgCO ₂ e	133.66
Monthly kgCO ₂ e	133.66	*	Asset Age	17	=	Total Device kgCO ₂ e	2272.22

17


Asset - Computer - Server - CHI-WIN-CTR1X4

ASSET SUMMARY

Name * CHI-WIN-CTR1X4

Asset Tag 5447585

Serial Number * 938547382



DETAILS DISCOVERY LICENSABLE SOFTWARE (0) INSTALLED SOFTWARE (0) CARBON FOOTPRINT NETWORK (0) INCIDENTS (0) SUPPORTED SERVICES (0) RELATIONSHIPS CONTRACTS USER ASSETS VENDOR VENDOR RECORDS (0) REPAIR

Asset Subtype Server

Catalog Name Dell PowerEdge R640

Assigned Manufacturer Dell

Assigned Model PowerEdge R640

Assigned Part Number 210-A00

Assigned Description 2 x Intel Xeon E5-2680 v4 2.5 GHz 16GB 2 x 16TB SAS 12Gb/s

Assigned User Allen W. Cope

Logfile Allen Cope

Location North America - USA - Chicago

Status Assigned

Environment Production

Use Policy Office Only

Service Level P2

Sensitivity Medium

Purchase Date 09/18/2023

Asset Age (mo) 17

Warranty Start Date 09/18/2023


Warranty End Date 09/18/2025

Warranty Terms 36

Warranty Expiry 09/18/2025


Serial 564764738

BRD



Additional Critical Fields

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18


Asset - Computer - Laptop - PVGRM037-MAC

ASSET SUMMARY

Name *PVGRM037-MAC

Asset Tag7568679

Serial Number *C02M646FFD59



DETAILS

DISCOVERY

LICENSABLE SOFTWARE (0)

INSTALLED SOFTWARE (327)

CARBON FOOTPRINT

NETWORK (1)

INCIDENTS (0)

SUPPORT

Mfg Est Total kgCO2e349

Mfg Est Total kgCO2e349

Direct Emissions kgCO2e94.2

Monthly kgCO2e2.62

% of emission on creation73

Creation Amount kgCO2e254.77

Useful Life36

Asset Age17

=

=

=

=

Creation Amount kgCO2e254.77

Direct Emissions kgCO2e94.2

Monthly kgCO2e2.62

Total Device kgCO2e44.54

19


Asset - Computer - Laptop - PVGRM037-MAC

ASSET SUMMARY

Name *PVGRM037-MAC

Asset Tag7568679

Serial Number *C02M646FFD59



DETAILS

DISCOVERY

LICENSABLE SOFTWARE (0)

INSTALLED SOFTWARE (327)

CARBON FOOTPRINT

NETWORK (1)

INCIDENTS (0)

SUPPORTED SERVICES (0)

RELATIONSHIPS

CONTRACTS

USER ASSETS

VENDOR

FINANCE

FINANCIAL TERMS

Asset SubtypeLaptop

Assigned UserDing Zhang

Assigned ModelMacBook Pro

Assigned Part NumberA1728

Assigned DescriptionApple MacBook Pro 13 inch Retina Display (512GB) (M1) (MSRP \$1299.00)

Asset Age (years)37

Useful Life (years)36

In Service Date09/12/2023

StatusAssigned

EnvironmentProduction

Use PolicyOffice/Reserve with VHS

Service LevelT3

SensitivityLow

Purchase Date09/12/2023

Warranty Terms36

Warranty Start Date09/12/2023


Warranty End Date09/12/2028

Barcode3456789012345

RFID8765

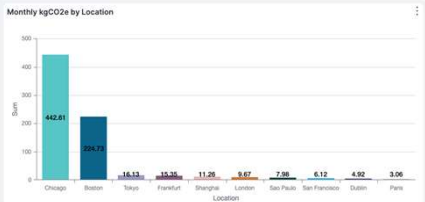
Additional Critical Fields

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20

Monthly kgCO2e by Location



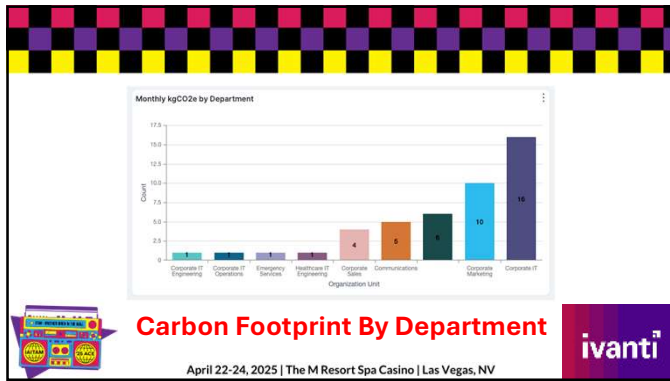
Carbon Footprint By Location

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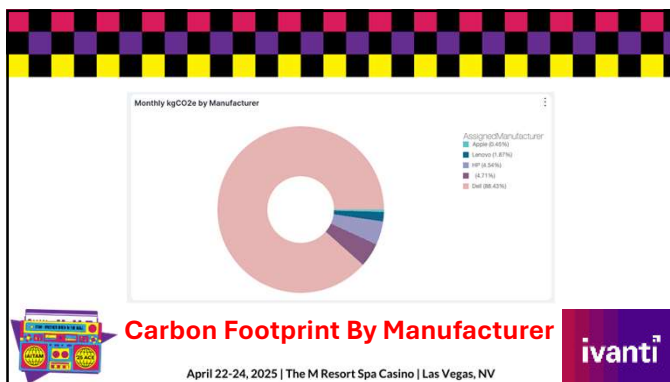


21

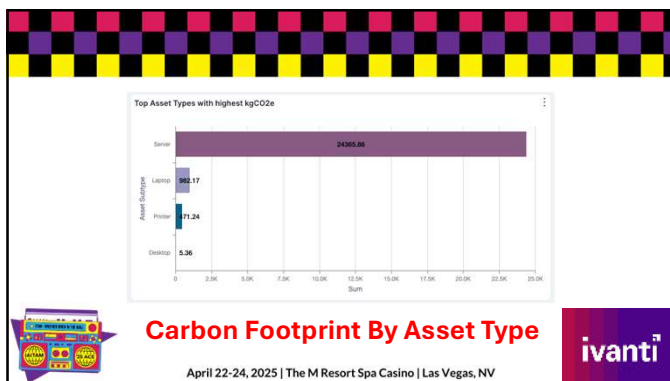
7



22



23



24

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Product Hardware Item - Apple MacBook Pro

SUMMARY

Status: Approved

Requester: Internal Services

Item Name: Apple MacBook Pro

Recommended Vendor: Apple

Est External Cost: 1,599.99

Est Internal Price: 1,699.00

Expiry Date: 07/29/2023 8:00 PM

Support Team: Service Management Team

Support Lead: Don Jones

Description: Apple MacBook Pro 13-inch Retina Display 512GB [D1308] (8GB) M1G32LL/A (2014)

Self Service Description: Apple MacBook Pro 13-inch Retina Display 512GB [D1308] (8GB) M1G32LL/A (2014)

ITEM DETAILS

ASSETS (22)

CARBON FOOTPRINT

STOCK LEVELS (1)

ACTIVE ORDERS (0)

ORGANIZATIONAL UNITS

APPROVED VENDORS (0)

SUGGESTED ALTERNATIVES (0)

JOURNAL

ATTACHMENTS

Mfg Est Total kgCO2e: 349

Mfg Est Total kgCO2e: 349

Direct Emissions kgCO2e: 94.2

% of emission on creation: 73

Creation Amount kgCO2e: 254.77

Useful Life: 36

Creation Amount kgCO2e: 254.77

Direct Emissions kgCO2e: 94.2

Monthly kgCO2e: 2.62

Product Catalog (If Available)

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28


Asset - Computer - Laptop - PVGRM037-MAC

ASSET SUMMARY

Name: PVGRM037-MAC

Asset Tag: 7568679

Serial Number: C02M646FFD59



DETAILS

DISCOVERY

LICENSEABLE SOFTWARE (0)

INSTALLED SOFTWARE (327)

CARBON FOOTPRINT

NETWORK (1)

INCIDENTS (0)

SUPPORT

Mfg Est Total kgCO2e: 349

Mfg Est Total kgCO2e: 349

Direct Emissions kgCO2e: 94.2

Monthly kgCO2e: 2.62

% of emission on creation: 73

Creation Amount kgCO2e: 254.77

Useful Life: 36

Asset Age: 17

Creation Amount kgCO2e: 254.77

Direct Emissions kgCO2e: 94.2

Monthly kgCO2e: 2.62

Total Device kgCO2e: 44.54

Inherited CO2e Data On The Asset From The Product Catalog

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29


Asset - Computer - Laptop - PVGRM037-MAC

ASSET SUMMARY

Name: PVGRM037-MAC

Asset Tag: 7568679

Serial Number: C02M646FFD59



DETAILS

DISCOVERY

LICENSEABLE SOFTWARE (0)

INSTALLED SOFTWARE (327)

CARBON FOOTPRINT

NETWORK (1)

INCIDENTS (0)

SUPPORT

Mfg Est Total kgCO2e: 349

Mfg Est Total kgCO2e: 349

Direct Emissions kgCO2e: 94.2

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Creation Amount kgCO2e: 254.77

Useful Life: 36

Asset Age: 17

Creation Amount kgCO2e: 254.77

Direct Emissions kgCO2e: 94.2

Monthly kgCO2e: 2.62

Total Device kgCO2e: 44.54

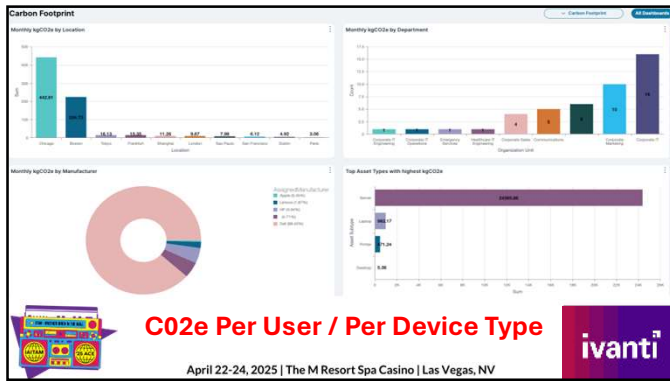
The Unique Asset Data Is Critical For Reporting

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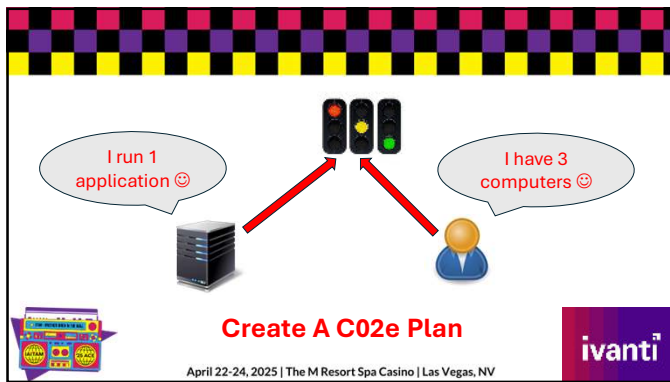
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30

10



31



32

- Do Your Homework on C02e!
- Only Offer The Most Sustainable Assets
- Find And Replace The Worst First
- Virtualize Whenever Possible
- Track Your Progress in kgC02e!!!
- Report Your Findings To Senior Leadership

Create A C02e Plan

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33

Carbon Footprint Goes Down = ESG Score Goes Up

Show Your C02e Plan

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34

Mom Always Said: "Leave it as you found it"

For Our Future

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35

Take The C02e Assessment

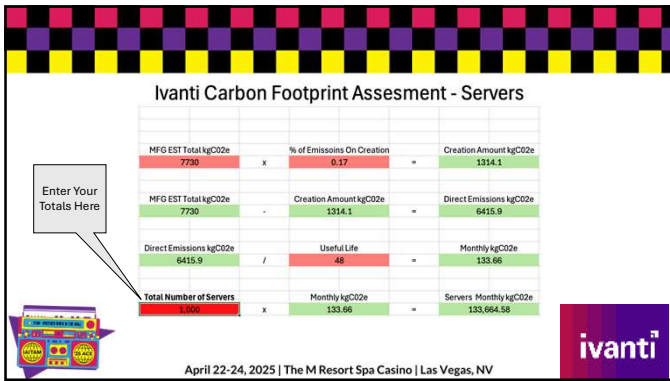
Total Laptops
Total Desktops
Total Servers
Total VMs
Total Network Devices

<https://tinyurl.com/ivanti-Carbon-footprint>

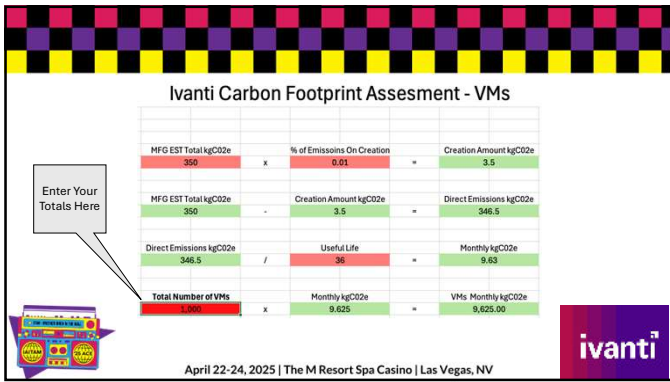
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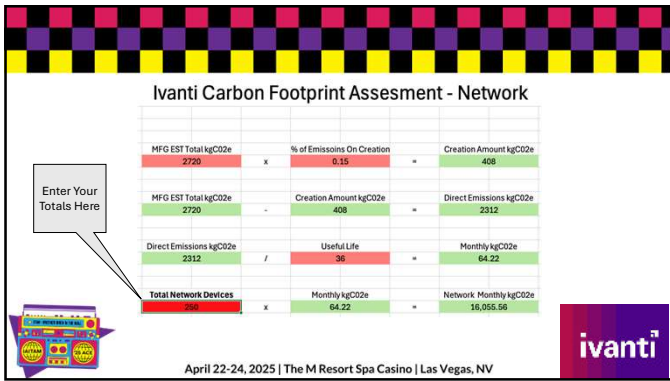
36



40



41



42

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MA0 Another pic option to choose from
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