

# Your Show's Carbon Footprint: Grab the Advantage or Fall Behind

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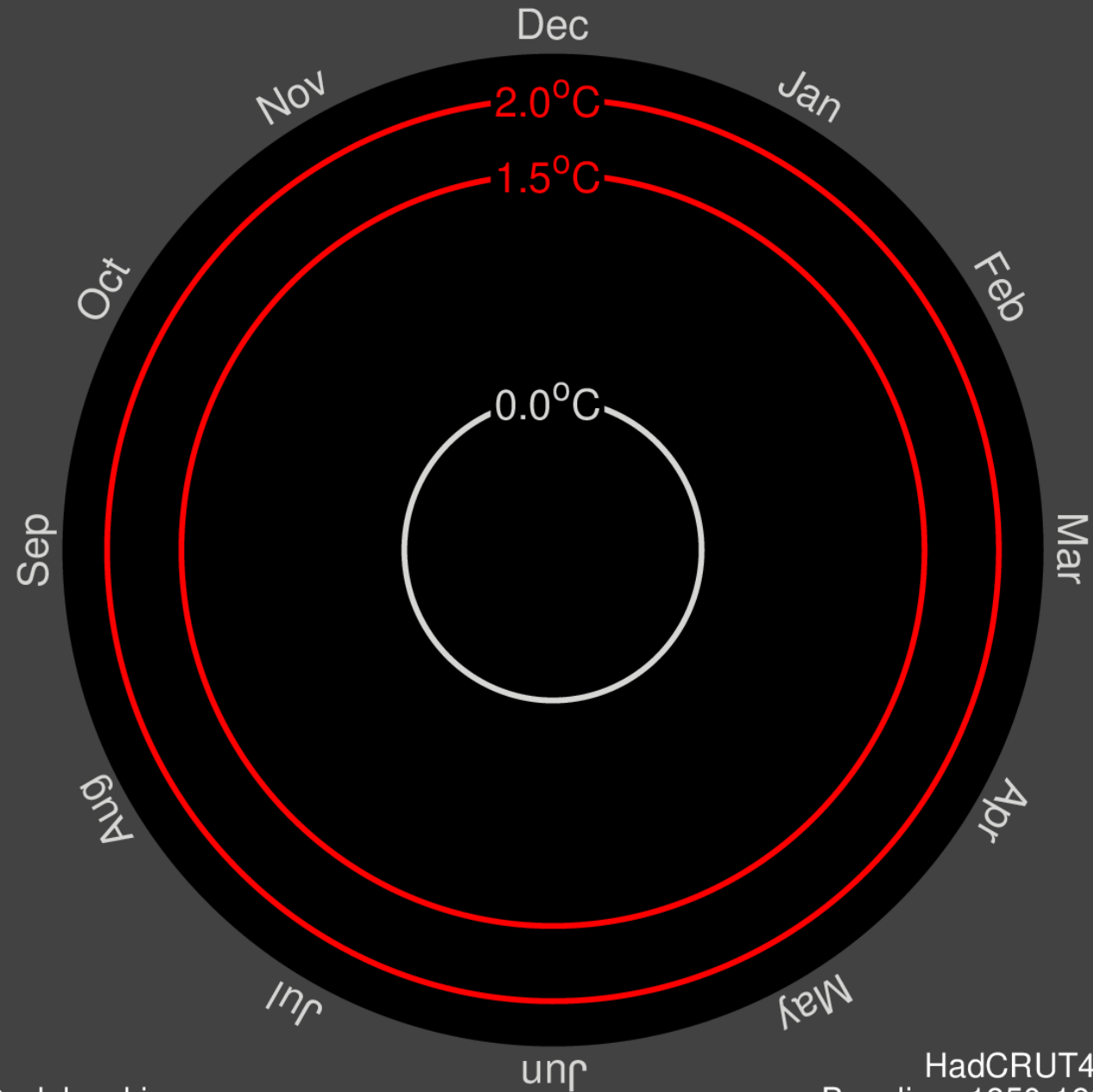


April 18, 2024

# Corporate Carbon Budgets Are Taking Aim At Large Shows

- The largest shows where they have the largest presence will be targeted first.
- How to create a baseline of your show's Scope 3 GHG; what data needs to be collected.
- Learn what EDPA and ESCA are doing to aid your journey.
- Partnering with your venue, destination, contractors, attendees, speakers, and exhibitors/sponsors to get it done.
- Best practices from Sustainability Masters.

# Global temperature change (1850-2020)



@ed\_hawkins

HadCRUT4.6  
Baseline: 1850-1900

# NET ZERO CARBON EVENTS

[SEE PLEDGE SIGNATORIES | SUPPORTERS HERE](#)



# NET ZERO CARBON EVENTS

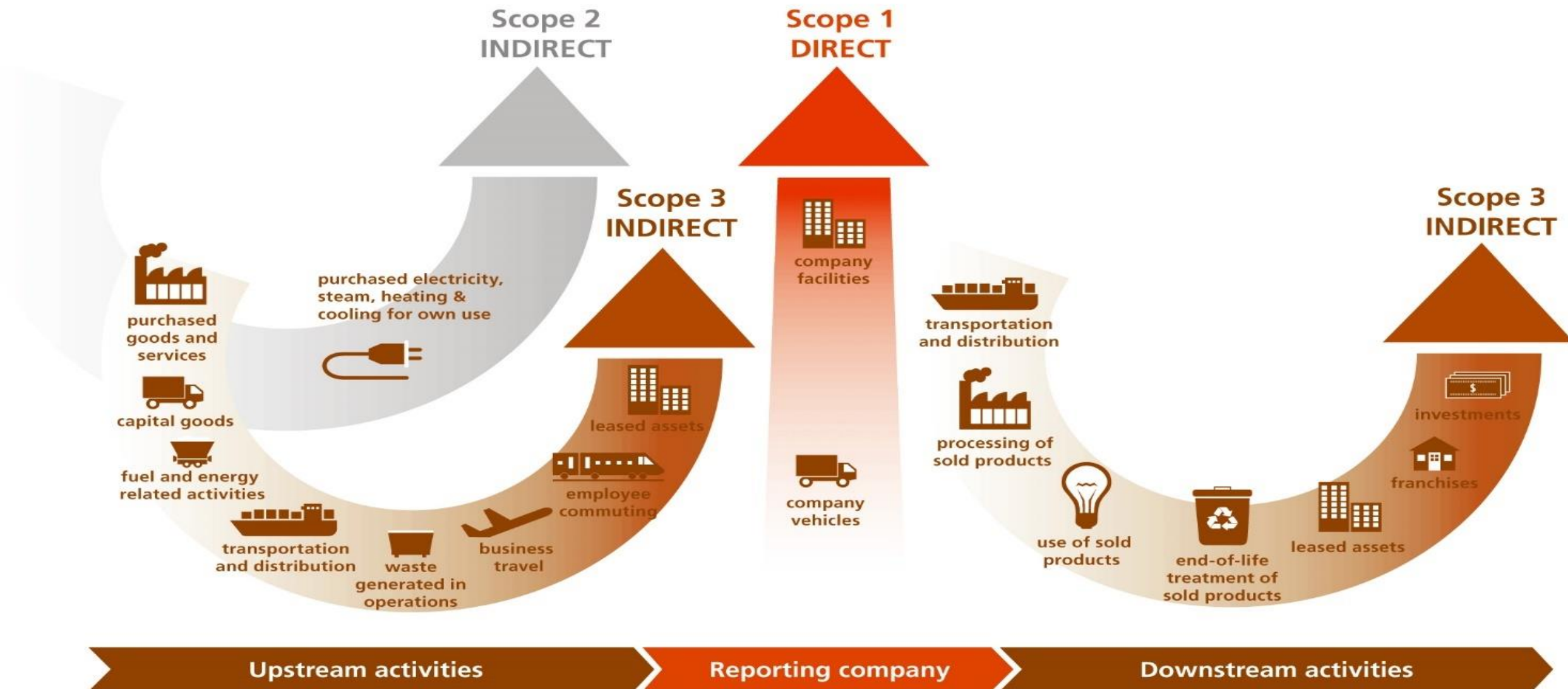
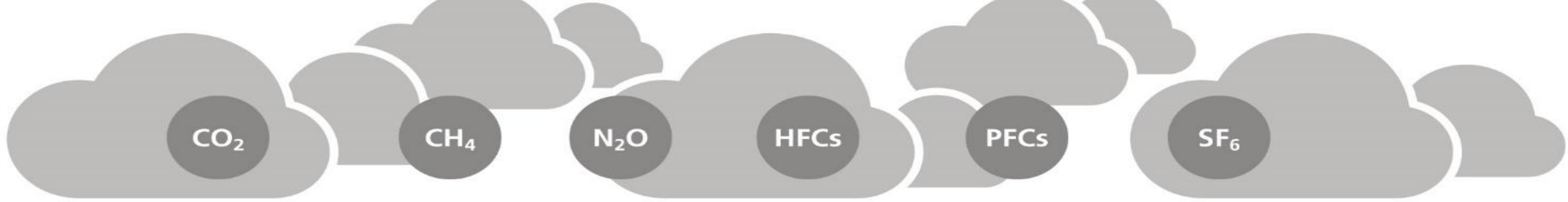
- Measurement, Reporting & Verification
- Activation & Adaptation towards Decarbonization
  - Production, Waste & Circularity
  - Venues
  - Logistics
  - Travel & Accommodation
- Communication & Education
- NZCE Services & Development

# Carbon Budget



# Green House Gas, Scopes 1, 2, & 3







# A Carbon Budget is:

- a concept used in climate policy by your clients to help set emissions reduction targets in a fair and effective way.
- typically designed to keep climate warming below a specified limit.

**Example**

# Cement Manufacturing Exhibitor

## 3 main sources of emissions-

~ 10% from electricity used to power auxiliary processing equipment (motors etc).

~40% from the fuel source used to heat the limestone;

~50% from the chemical reaction when limestone is heated to form calcium oxide;

**In this scenario,**

~ 10% from electricity used to power auxiliary processing equipment (motors etc).

Scope 2 electricity emissions can be quickly decarbonized.

**In this scenario,**

~40% from the fuel source used to heat the limestone;

Scope 1 emissions from the fuel source might be more difficult but should be achievable by electrifying the process and sourcing green power.

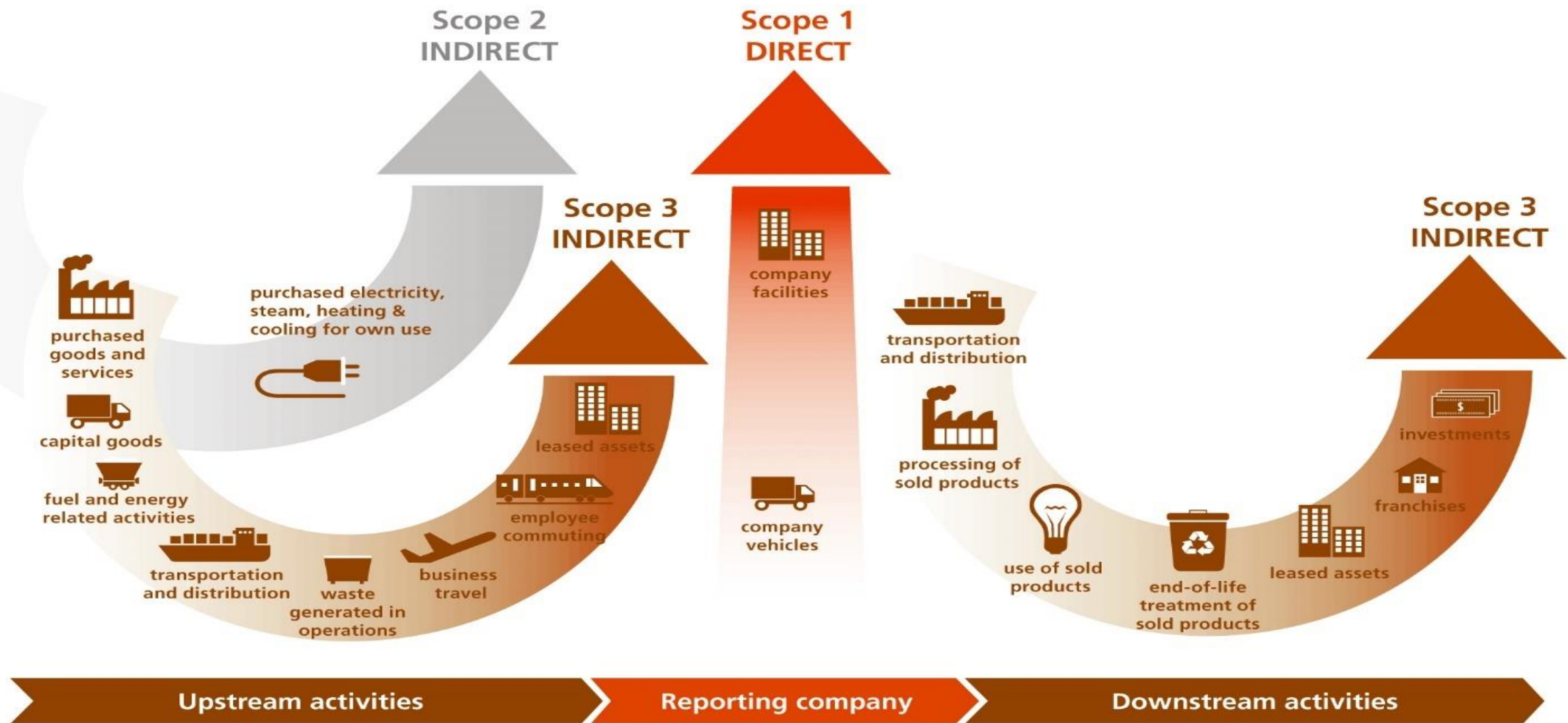
**In this scenario,**

~50% from the chemical reaction when limestone is heated to form calcium oxide;

Emissions from the chemical reaction have no straight-forward solution, and a significant technology breakthrough is required.

## In this scenario,

- while they work on a significant technology breakthrough, they are going to look at Scope 3 emissions for reductions.
- This will impact their “Go To Market” strategy.

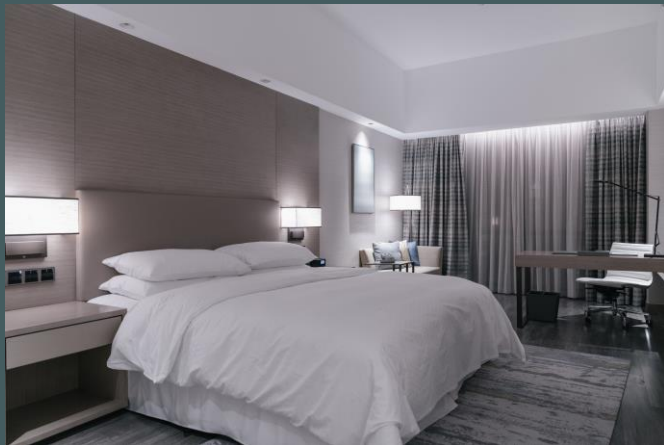
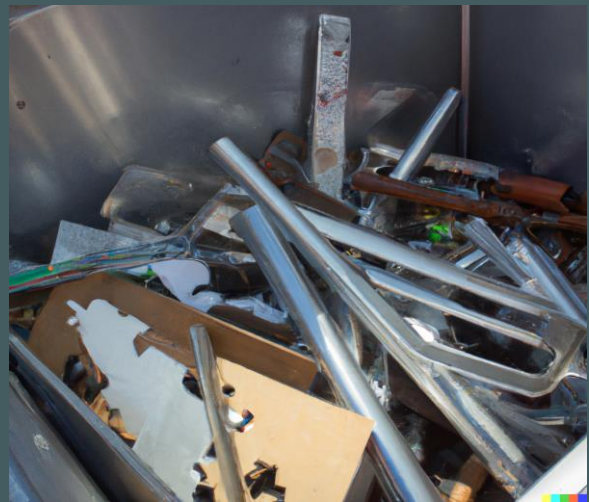


How do your clients get a handle on their Scope 3 emissions?



# Carbon Footprint





## Carbon Footprint Measurement Tool™

### Basic Details

Name of the event

Event Start Date

Event End Date

Meeting Venue

Address

Country

### Responsibility

Name: Joe The MEM

Email: [Joe@maritz.com](mailto:Joe@maritz.com)

Flights

Name: Joe The MEM

Email: [Joe@maritz.com](mailto:Joe@maritz.com)

Ground Transportation

Name: Joe The MEM

Email: [Joe@maritz.com](mailto:Joe@maritz.com)

F&B

Name: Joe The MEM

Email: [Joe@maritz.com](mailto:Joe@maritz.com)

Hotel Guest Room Energy

Name: Suzy The MEM

Email: [Suzy@maritz.com](mailto:Suzy@maritz.com)

Venue Meeting Space Energy

Name: Joe The MEM

Email: [Joe@maritz.com](mailto:Joe@maritz.com)

Freight

Name: Joe The MEM

Email: [Joe@maritz.com](mailto:Joe@maritz.com)

Waste



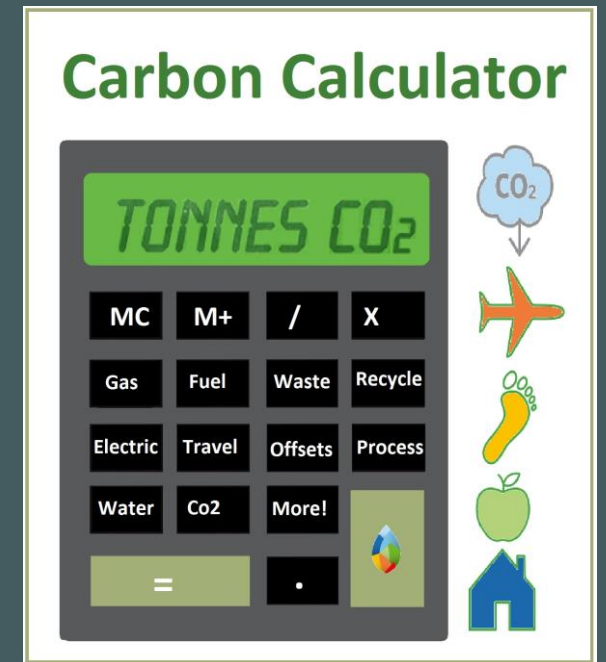
About 85% of business travel emissions are from air travel.



Business-class emissions are 2 to times higher than economy class

# Carbon Footprint of LSR To Date:

- Round trip travel to the event
  - Air = 8.00 tons CO<sub>2</sub>e
  - Drive & Ground Transport 0.33 tons CO<sub>2</sub>e
- Accommodation 0.84 tons CO<sub>2</sub>e
- Food & Beverage
- Meeting space energy
- Waste
- Freight (in and out)



# 2023 IMEX America Imprint

WHEN: October 17 - 19, 2023

LOCATION: Mandalay Bay, Las Vegas

MARITZ TEAM: 122 from Corporate, AT&L and ESN

HOSTED EVENTS ATTENDED: 447

MEETINGS ATTENDED: 1,375

## CARBON FOOTPRINT IN LAS VEGAS

Pledge: Net Zero by 2050

CO<sub>2</sub>  
Emissions

**63.08**

Metric Tonnes

Equivalent to 8,275,323  
charged smartphones

# Who Else Is Doing This?

- Amazon
- Destinations International
- Electronic Arts
- MasterCard
- Toyota

# EDPA & ESCA SUSTAINABLE EXHIBITION GUIDANCE

## Sustainable Exhibition Guidance





# Sustainability--why now?

- It is increasingly more important as an evaluation criterion by your clients.
- More companies have “carbon budgets”.
- The unknown of how sustainable exhibiting is...  
...weighs heavily on decisions to proceed.

# Sustainability--why now?

- Suppliers when bidding are asked about their green initiatives.
- How do EDPA and ESCA help members to understand “sustainability”
- How to best advise steps to be taken short, medium and long term?

# Overview of the guidance

1. Design
2. Exhibit Structures, Flooring, Furnishings, Staging Materials, Lighting, Electronic Display, Graphics & Signage
3. Packaging
4. Waste Management
5. Supply Chain Procurement and Engagement

# Overview of the guidance

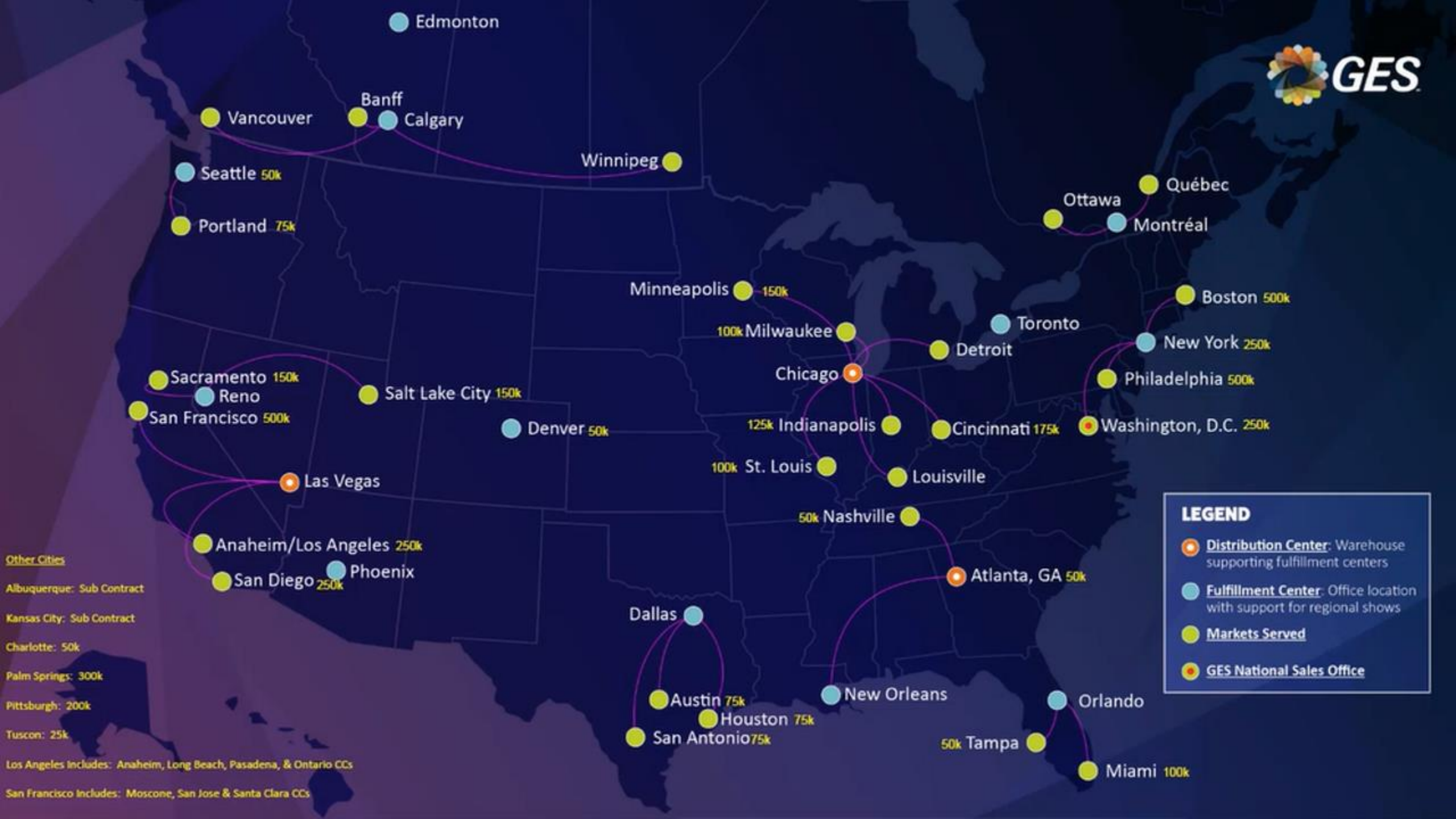
6. Logistics, Remote & Last Mile, Traffic Management & Smart Cities
7. The Human Element, Resource Commitment, Personnel, Diversity Equity Inclusion, Community, Crew
8. Energy & Sustainable IT
9. Communications and Marketing

# Ryan Green Manager Of Strategic Supply & Sustainability



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**LEGEND**

-  **Distribution Center:** Warehouse supporting fulfillment centers
-  **Fulfillment Center:** Office location with support for regional shows
-  **Markets Served**
-  **GES National Sales Office**

Other Cities

Albuquerque: Sub Contract

Kansas City: Sub Contract

Charlotte: 50k

Palm Springs: 300k

Pittsburgh: 200k

Tucson: 25k

Los Angeles Includes: Anaheim, Long Beach, Pasadena, & Ontario CCs

San Francisco Includes: Moscone, San Jose & Santa Clara CCs



# SUSTAINABILITY IS IN OUR DNA



## PAPERLESS ORDERS

Through our ecommerce, mobile apps and onsite services, GES has **reduced** paper consumption by more than 200,000 sheets annually



## MODULAR STRUCTURES

Options including AMP, FIT3 and GEM provide a range of 100% **reusable** structures, providing a sustainable, modern look



## GRAPHICS

GES provides options for 100% **recyclable** substrates and 100% **post-consumer recycled content** fabric banners. No Volatile Organic Compounds (VOC) in inks



## CARPET

Carpet is **reused** multiple times, maintaining the event experience while reducing material use and waste generated at the event



## FURNITURE

High quality furniture reused and repaired for multiple use



## TRANSPORTATION *Reduce Carbon Emissions*

GES has implemented several initiatives to reduce transportation emissions wherever possible, including a regional operations model to lower long-haul shipments, and partnered with EPA Smartway certified transport partners



# Dr. Katerina Chagoya Sustainability Coordinator



[Katerina.Chagoya@occc.net](mailto:Katerina.Chagoya@occc.net)







# Orange County Convention Center Sam Lippman Large Show Roundtable

April 18, 2024

# The Orange County Convention Center's

## SUSTAINABILITY ACTION PLAN 2040 GOALS



# OCCC Green Team



**Dr. Katerina Chagoya**  
Sustainability Coordinator

**PhD Mech Engineering**  
**LEED Green Associate**

- Overall Program Lead
- LEED Certifications
- Utility Data Analysis
- Water Conservation



**Rochelle Mindrum**  
Sustainability Assistant Coordinator

**B.S. Interdisciplinary**  
**Studies**

- Green Events
- Donations
- Post-Event  
Sustainability Reports
- Composting



**Michael Franks**  
Maintenance Coordinator

**LEED Green Associate**

- Renewable Energy
- EV Charging
- Electrical  
Submetering
- Scrap Metal  
Recycling



**Paul Suedmeyer**  
Environmental Services Supervisor

**B.S. Physics**  
**CMP**

- Waste & Recycling  
Programs
- ISO 14001  
Environmental  
Management System





# Top 3 Green Event Requests

## Sustainability Data Report



## Composting Food Waste



## Donations of Food & Goods



# Data for Sustainability

OCCC Sustainability metrics are tracked monthly, and for each requested show

- **Energy Data**
  - Electricity used in all event spaces (*meeting rooms, exhibit halls, lounges, cafeterias, kitchens, etc*)
  - Solar power generated (*from our Solar Farm*)
  - Gas usage
- **Water Data**
  - Potable water used (kitchens, bathrooms, etc)
- **Waste & Recycling**
  - Cardboard
  - Mixed Recycling
  - Food waste composted
  - Scrap metal recycled
  - Donations
  - Landfill/Construction Waste
- **Other**
  - Plastic bottles avoided (*from bottle filling stations*)
  - Any special initiatives unique to show (*i.e. donations, p*)
  - Future metrics: EV charging stations used

**GENERAL DATA**

2024 SHOW YEAR | 01/10 MOVE IN | 01/13 SHOW START | 01/18 MOVE OUT

9 TOTAL EVENT DAYS | North/South Building LOCATION

950,282 EXHIBIT HALL (SQFT) | 196,632 MEETING ROOM (SQFT) | 278,500 CONCOURSE (SQFT) | 1,425,414 TOTAL (SQFT)

**UTILITY METRICS**

January SHOW MONTH | 723,011 ELECTRICITY USAGE (KWH) | 4,444 ELECTRICITY OFFSET FROM SOLAR PANELS (KWH) | 176 WATER USAGE (K GAL)

**WASTE DIVERSION**

VMX 2021 Waste Generated: 100 tons, 89.3% Waste Diverted

VMX 2022 Waste Generated: 11.38 tons, 47.1% Waste Diverted

VMX 2023 Waste Generated: 149 tons, 28.3% Waste Diverted

VMX 2024 Waste Generated: 5.1 tons, 24.6% Waste Diverted

Orange County Convention Center | P.O. Box 691509 | Orlando, Florida 32869-1509 | Phone 407-685-9800 | Toll Free 1-800-345-9845 | occc.net



**GENERAL DATA PREVIOUS YEARS**

Show Year	Move In	Show Start	Move Out	Total Event Days	Location	Exhibit Hall (sqft)	Meeting Room (sqft)	Concourse (sqft)	Total (sqft)
2021	06/02	06/06	06/10	9	North/South	762,636	161,461	278,500	1,202,597
2022	01/12	01/16	01/20	9	North/South	762,636	117,921	278,500	1,159,057
2023	01/06	01/15	01/19	14	North/South	857,816	160,419	278,500	1,296,735

**UTILITY METRICS PREVIOUS YEARS**

Show Year	Electricity Usage	Electricity Offset from Solar Panels	Water Usage
2021	372,819.95	9,166.54	53.94
2022	362,303.48	5,289.90	104.99
2023	416,012.45	10,303.60	164.92

**NOTES**

Plastic water bottles saved via water bottle fillers: 8,510 plastic bottles

For the 2024 show, four "waste hubs" were placed in the food area to capture food waste and separate other recyclables; these waste hubs generated 2,188 pounds of compostable material

Recommendations for future shows to increase sustainability efforts: limit carpet on show floor (exhibit hall had full carpeting), incorporate table tents in food area to promote waste hub program, place waste hubs closer to show floor so guests do not need to go out of their way to participate, notify exhibitors of donation program



# Compost and Recycling



## We Offer Composting!

- **We compost, in partnership with Sodexo, Live!**
  - Back-of-house in kitchens (*food scraped from plates*)
  - Front-of-house in exhibit hall (*at requested shows*)

**2025 Goal: 33% of waste is diverted from the landfill (recycled)**

- **We recycle:**
  - Cardboard
  - paper, glass, aluminum, plastic
  - scrap metal
  - cooking oil
  - electronic waste, lightbulbs, and more.
- **Every landfill bin has a recycling “partner”**
  - 575 indoor landfill & recycling duos in every meeting room and in concourses
  - 120 duos located outdoors



# Client Donations



We ensure food and goods stay out of the landfill and in our community

- **The OCCC has a very active donations program**
  - We give to schools, nonprofits, and local charitable organizations
  - 213,000 pounds of food and beverages donated
  - 138,000 Pounds (furniture, office supplies, clothes, toiletries, etc.) donated
- **On June 15, 2023, the Orange County Convention Center received the Harris Rosen Philanthropic Award for its charitable donations and sustainability efforts.**



# Hyper-local Food Production



## The OCCC is home to our Center-to-Table Gardens

- **81 indoor hydroponic grow towers**
  - 44 planting spots per tower
  - 90 indoor grow lights
- **Seedlings are sprouted on-site**
- **Dedicated farming staff**
- **Produces 50,000+ lettuces and herbs annually**
- **Greens are used by our Sodexo, Live! chefs in your meals!**





# Energy, Solar, and Water



## Goal 2025: Run on 5% renewable energy

- **North/South Building home to rooftop solar farm**
  - 1MW (upgrading to 2MW array as we speak)
  - 5,808 individual solar panels
  - ~5 football fields
  - Generates an average of 58,000 kWh of energy per month
  - Panels have all been removed (for upgrade!) as of last week
- **5 on-the-ground solar array projects**

## OCCC has energy and water use reduction goals

- **The N/S Building is LEED (O+M) Certified**
- **Energy Conservation:**
  - HVAC Upgrades (*in progress*)
  - Exhibit Hall LED lighting retrofit (*in progress*)
  - Roof replacement (*construction ongoing*)
  - Electrical sub-metering
- **Water Conservation:**
  - Low-flow bathroom faucets



# Reducing Tailpipe Emissions



**2025 Goal: 95% of Fleet is electric or hybrid**

- **Fleet Electrification**

- Fleet vehicles include:
  - Trucks
  - Automobiles
  - Golf & Utility Carts
  - Lifts (Boom, scissor, forklift)
  - Scooters & Segways
- 92% of the OCCC's fleet is electric or hybrid



**2025 Goal: Increase walkability & Deploy EV charging stations in 1% of parking spaces**

- **Electric Vehicle Charging Stations**

- 12 EV charging stations for guests & visitors
- +6 high-speed charging stations coming in 2024
- Goal: 64 EV charging stations

- **Pedestrian Bridges**

- 5 bridges connect us to the Hyatt, Hilton, Rosen Plaza, and Rosen Centre



# Stay Connected!

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Facebook | Instagram | LinkedIn

**@OrangeCountyConventionCenter**

Twitter

**@OCCC**



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**THANK YOU!**



# QUESTIONS &

# THANK YOU!



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