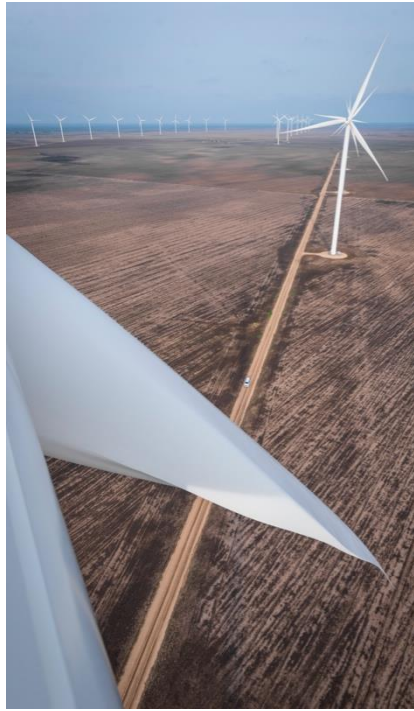


Talking Carbon with Customers

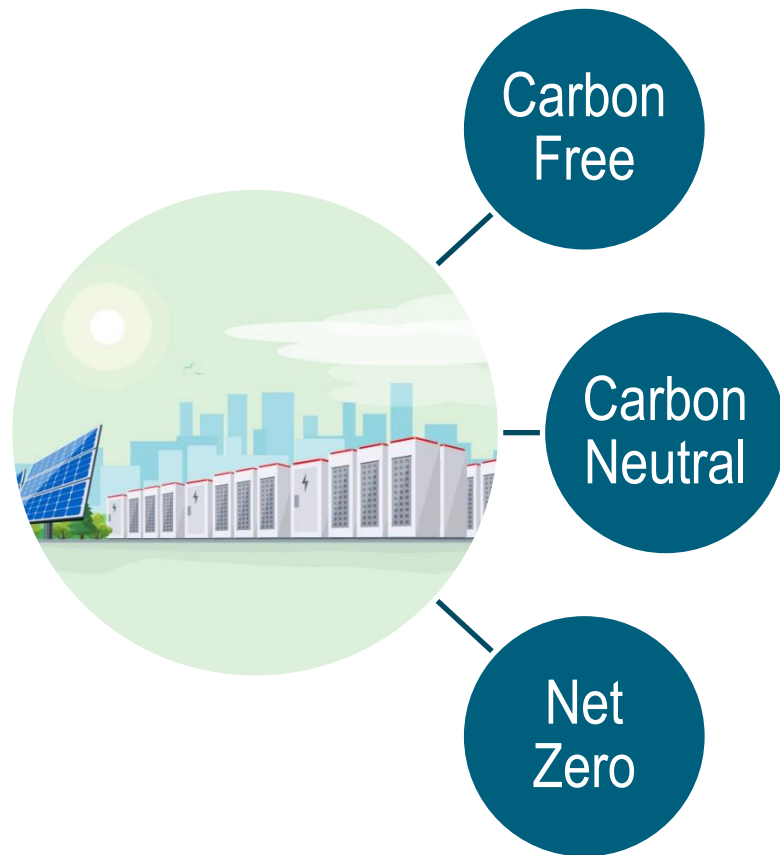
Texas Public Power Association – Environmental Committee



Agenda

- **Review of Corporate Sustainability Goals**
 - Key Terms
 - Scopes of Emissions
- **Customer Products and Services**
 - National Trends
- **Tools to Assist with the Conversation**
 - On-Site Solar Basics
 - Carbon Calculator

Corporate Sustainability Goals –What do they mean?

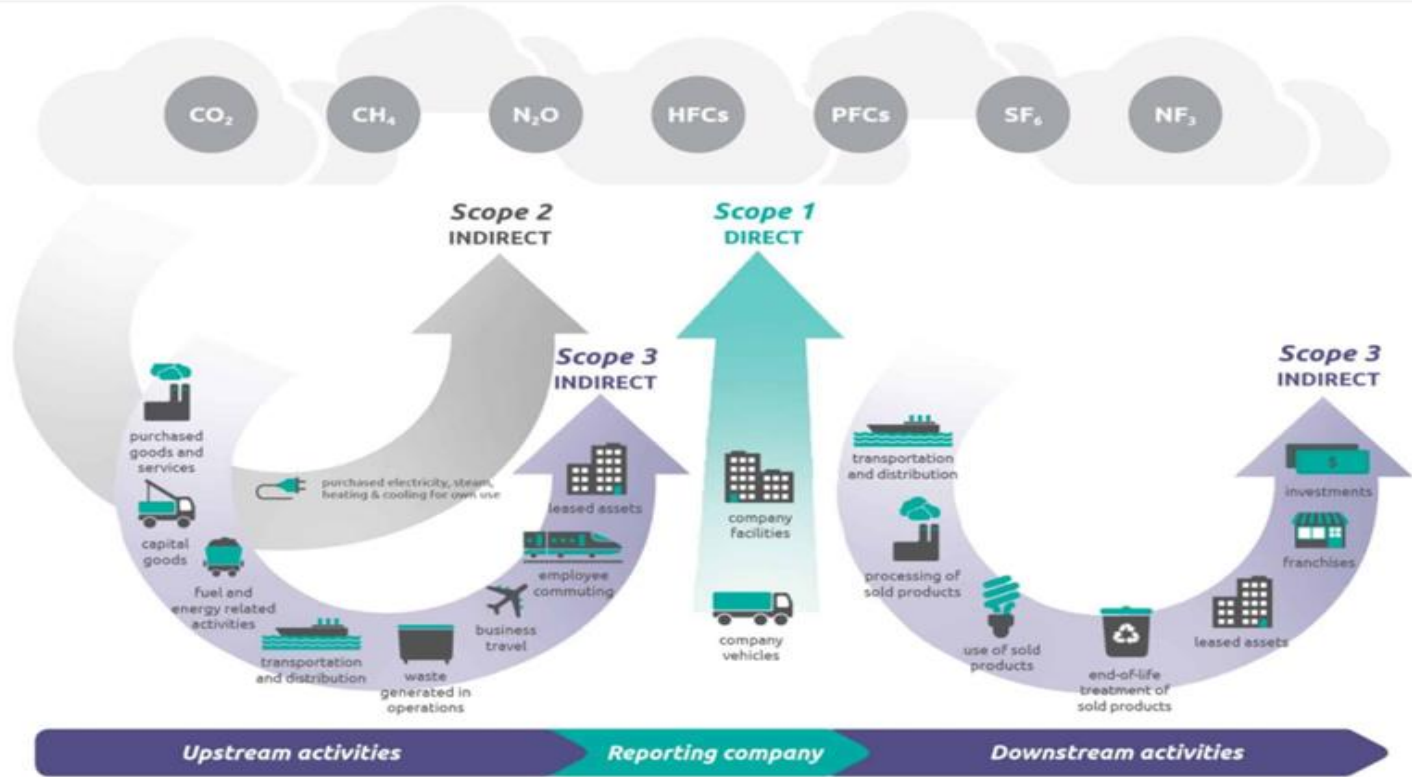


Corporate Sustainability Goals – What do they mean?

- **Scope 1 – All Direct Emissions**
- **Scope 2 – Indirect Emissions**
- **Scope 3 – All Other Indirect Emissions**



Corporate Sustainability Goals – What do they mean?



Corporate Sustainability Goals - Examples



Carbon neutral since 2007.
Carbon free by 2030.



FedEx – Carbon neutral by 2040



Duke Energy – Net Zero by 2050

Customer Products and Services – National Trends

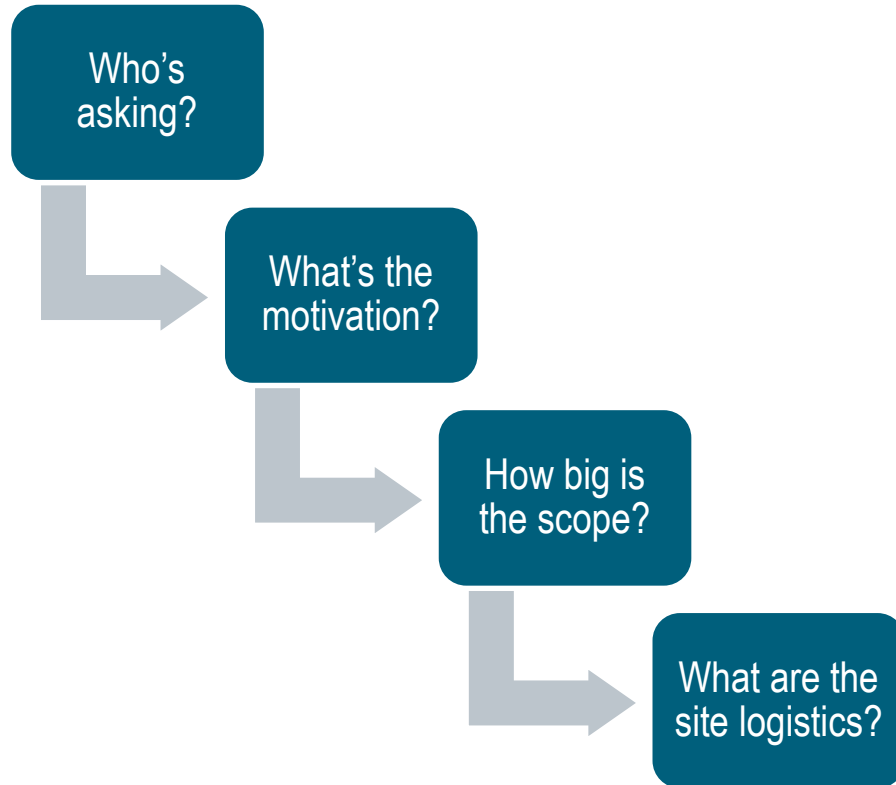
Goal: Serve the needs of your customers

- **Energy Efficiency**
- **Community Solar**
- **Net Metering**
- **Solar Rebates**
- **Electric Vehicle Incentives**
- **Green Tariffs**
- **Legislation**



Tools to Assist the Conversation – What do I do?

Corporate sustainability goals create opportunity and challenges for your community!



Tools to assist the conversation– On-site solar basics

Ground-Mount Solar

1. 1MW = 5-7 Acres of Land
2. Point of Interconnection Matters!
 - a) 500 ft = \$250K

Roof-top Considerations

1. 1MW = Approx. 100,000 sq. feet
2. Do I lease or own the building?
3. Roof Integrity
 - a) Age of Roof
 - b) Type of Roof

Solar Parking Canopy Considerations

1. 1MW = 300-400 parking spaces
2. Is a more expensive type of Solar Installation
 1. Steel can be as much as 40% of cost



Tools to assist the conversation– Carbon Calculator

Duke Energy Sustainable Solutions- Carbon Emissions Calculator

Carbon footprint calculator for businesses

Use our carbon footprint calculator to determine your organization's Scope 2 carbon emissions and more.

To get started

Enter your organization's name and select the year for which the energy usage data is being provided. Then enter up to 5 locations to get a snapshot of your organization's carbon footprint.

Company Name _____ Energy Usage Year **2020** ▼

Premise Name	Street Address	City	State	ZIP Code	Utility Name	Energy Usage (kWh Calendar Year)
Premise Name	Street Address	City	State	ZIP Code	Utility Name ▼	Energy Usage

[+ ADD ANOTHER PREMISE](#) [SEE RESULTS](#)

Your Results

Change Premise
All ▼

Your Renewable Energy Score 0%	Your Carbon Free Score 0%	Emission Factor (lbs/MWh) 0	CO ₂ Emissions (lbs) 0
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Generation Mix - Balancing Authority: (Name of the Balancing Authority) ⓘ

- Nuclear
- Coal
- Natural Gas
- Hydro
- Solar
- Wind
- Oil
- Other

Overall Calculation Methodology ⓘ

[See Disclaimers Below](#)

Web Address:

<https://carboncalculator.de-innovations.us/#/dashboard>

Tools to assist the conversation– Carbon Calculator

Renewable Energy Score

The percentage of grid-sourced energy generated from renewable energy sources: solar, wind and hydro

Carbon Free Score

The percentage of grid-sourced energy generated from carbon-free sources: solar, wind, hydro and nuclear

Emissions Factor

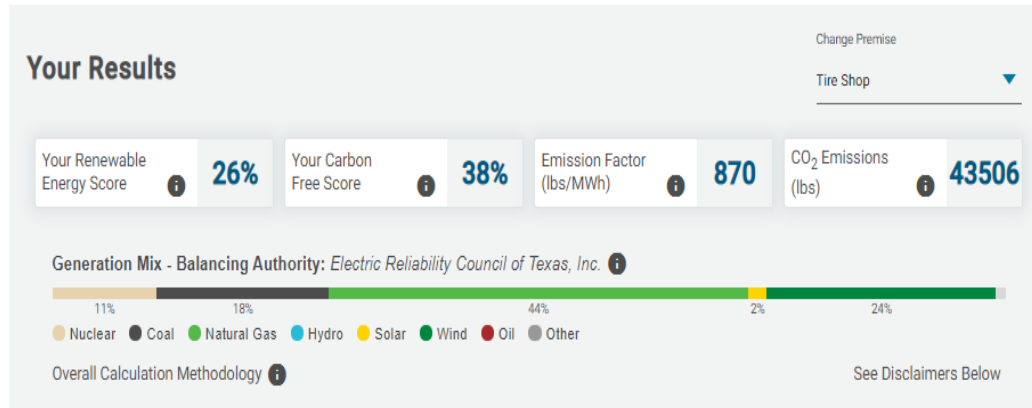
Emissions released per 1 MWh energy generated. This tool calculates EF based on a mix of data from the U.S. Energy Information Administration (EIA) and the U.S. Environmental Protection Administration (EPA) measured at the local grid Balancing Authority level.

CO2 Emissions (lbs.)

The amount of CO2 generated as Scope 2 emissions by the premise(s) for the year shown

Premise Name	Street Address	City	State	ZIP Code	Utility Name	Energy Usage (kWh Calendar Year)
Tire Shop	315 N Locust St	Denton	TX	76201	City of Denton - (TX)	50,000

[+ ADD ANOTHER PREMISE](#) [SEE RESULTS](#)



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