

Going Beyond Scopes 1 & 2

Engaging Your Supply Chain, Customers, and Employees in Renewable Electricity Procurement

Washington DC – September 2023



Welcome

Introduction to Today's Topic



EPA White Paper

Renewable Electricity
Procurement on Behalf of Others:
A Corporate Reporting Guide





Renewable Electricity Procurement on Behalf of Others: A Corporate Reporting Guide



May 2022

Download at: https://www.epa.gov/system/files/documents/2022-05/renewable_electricity_procurement.pdf

Our Panel



Erica Logan

Director, Sustainability
Criteria Development

Global Electronics Council



Briana Amoroso

Manager, Energy &
Climate Practice

3Degrees



Tom Raymond

Director of Environmental
Sustainability

Hormel Foods





PURCHASING: PURCHASING: DECARBONIZING IT AND SOLAR SUPPLY CHAINS

Erica Logan, Global Electronics Council Renewable Energy Markets (REMTM) Conference September 20, 2023

OUR PURPOSE

The Global Electronics Council® (GEC) is a mission driven not-for-profit that collaborates to achieve a world of only sustainable electronic products and services.

Founded in 2006, GEC is an independent, impartial nonprofit that advances sustainable electronics by leveraging the power of the purchaser.

GEC manages EPEAT, a global Type 1 ecolabel, recognized by ANAB (ANSI National Accreditation Board) as meeting the standards defined by ISO 14024: Environmental Labels and Declarations.





Largest Selection of More Sustainable Electronics















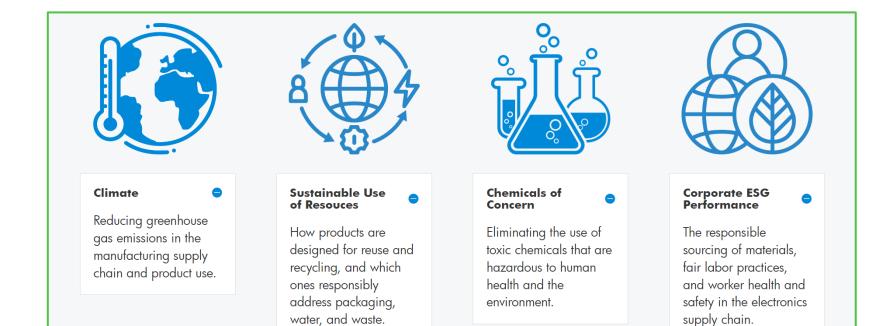


EPEAT is recognized by the U.S. Federal Government in its Recommendations of Standards, Specifications, and Ecolabels for Federal Purchasing

More than US \$2 billion spent on EPEAT registered products annually.



EPEAT Sustainability Impact Criteria



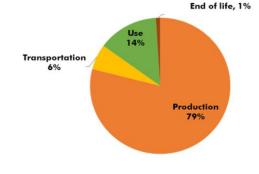


GHG Emissions for ICT Products





- 77% of total GHG emissions from the electronics industry are due to supply chain activities (World Economic Forum, 2021)
- Contribution of upstream manufacturing to overall GHG emissions is significant, particularly for portable products

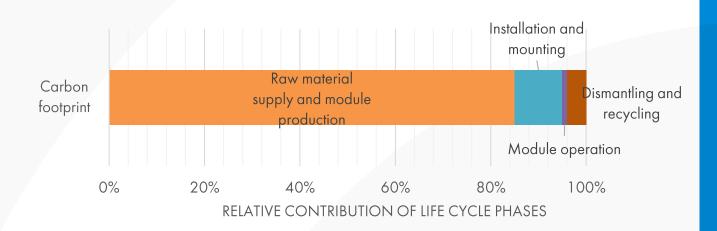


Tablet





Photovoltaic Module GHG Emissions



Embodied (supply chain) carbon or GHG emissions from solar panels varies widely.

Manufacturing processes account for > 50% of the lifecycle climate impacts (CO_2 equivalents) of solar installations, and as much as 80% for some modules



Decarbonizing the Supply Chain with EPEAT



- GEC recognizes the imperative of addressing climate impacts NOW!
- Two EPEAT initiatives aimed at accelerating progress to reduce green house gas emissions with an emphasis on decarbonizing the supply chain



EPEAT Climate+
Designation for IT products

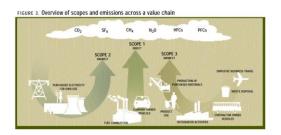


EPEAT for Solar
With Low Carbon Thresholds



EPEAT Climate Criteria

- Measure carbon/GHG emissions to understand impacts
 - Product carbon footprint(s), and
 - Corporate GHG inventory
- Establish and report on targets to reduce GHG emissions in alignment with best available climate science
 - > Manufacturer operations, and
 - Supply chain
- Implement best practices for decarbonization
 - Manufacturing energy efficiency
 - Renewable electricity sourcing, and
 - Product energy efficiency







BASED TARGETS







New EPEAT PV Low Embodied Carbon Criteria



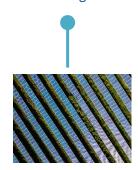
Reflects carbon emissions along a module's manufacturing supply chain as determined through life cycle analysis.

Polysilicon Cell Wafers are turned into PV It starts with polysilicon – the cells - the heart of a solar same material in computer panel chips **Module Ingot/Wafers** Cells are assembled into a Polysilicon is melted at high traditional PV module with a temperature to form ingots

which are sliced into wafers

System

Panels are installed, placed on a racking or tracker system, and connected to inverters that convert DC -> AC to be fed into the grid



metal frame and glass cover



EPEAT Low Carbon Solar Criteria



Low Carbon Solar

Required: The embodied carbon of the PV module shall be equal to or less than 630 kg CO₂₀/kWp.

~20% below IEA global average data

Ultra Low Carbon Solar

Optional: The embodied carbon of the PV module shall be equal to or less than 400 kg CO₂₀/kWp.

Best in class lowest reported emissions

Publicly Available LCI Data

Optional: Primary life cycle inventory data underlying alternative GWP coefficients shall be publicly available.

Contact Information

Erica Logan
Director, Sustainability Criteria Development
Global Electronics Council
elogan@gec.org

GEC website: GEC.org
EPEAT Registry: EPEAT.net



3Degrees.

OUR MISSION

We make it possible for businesses and their customers to take urgent action on climate change.



3Degrees.



INTERNATIONAL CLIMATE IMPLEMENTATION CONSULTING

PPAs & Renewable Energy Services

Optimized renewable energy procurement strategies

- + Power purchase agreements enable big strides to be made toward achieving scope 2 targets
- + Renewable procurement options such as utility green tariffs and green retail supply diversify renewable portfolios
- + PPA performance monitoring and EAC management streamline reporting tasks
- + Strategies to address electricity use in your supply chain



8.1GW+

global transactions executed

300+

Renewable energy advisory & implementation engagements completed

90+

renewable projects contracted

67+

countries where we buy, sell, or consult on clean energy



GOING BEYOND SCOPES 1 & 2

3Degrees can address all scopes of emissions

SCOPE 1 SOLUTIONS

- + Emissions reduction and removal projects to address residual emissions
- + Green Gas for corporates including options assessment and GPAs
- Goal setting
- + Implementation services
- + Transportation decarbonization LCFS, electrification/conversion cost analysis, RNG, fleets

SCOPE 1

Direct emissions-sources owned or controlled

SCOPE 2 SOLUTIONS

- + Renewable energy options assessment
- + Renewable energy procurement strategy
- Global unbundled EACs
- + Onsite Renewables
- + PPAs and vPPAs globally
- + Utility voluntary renewables programs in NA



Indirect emissions–from purchased electricity

SCOPE 3 SOLUTIONS

- + Emissions reduction and removal projects to address residual emissions
- PPA Aggregations
- + Transportation decarbonization LCFS/electrification, RNG, fleets



Indirect emissions—supply chain, transportation…etc.



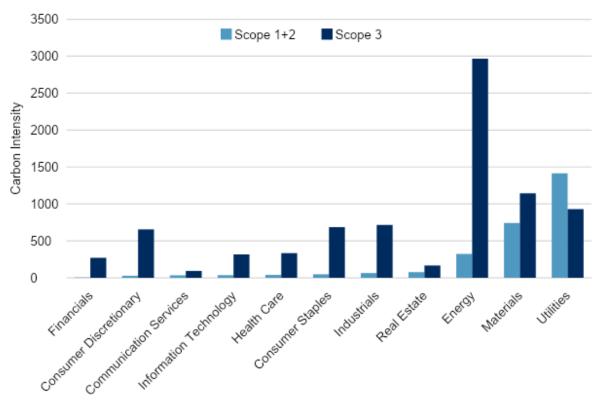
- + Energy assessments
- + Scenario planning
- + Carbon consulting
- + Disclosure and reporting
- + Scope 3 action plans
- Value chain interventions
- + Climate technology advisory

Measure, Plan, Reduce across all scopes and Compensate for what remains



State of scope 3 emissions for most organizations

Most organizations' scope 3 emissions make up >90% of their total GHG emissions inventory



Carbon intensity is measured in MTCO2/avg. unit of production as of Dec 2020. Source: S&P Global

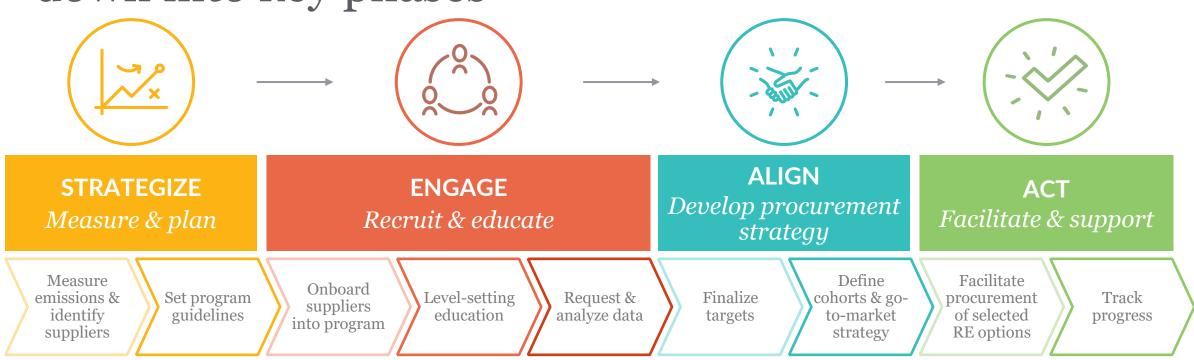
- + Many companies have:
 - + Taken action to address their scope 2 electricity emissions
 - + Set targets for scope 3 reductions
- + Much of the focus until now has been on collecting and improving scope 3 data (measurement)
- + Companies are realizing that it's time to act on scope 3 to meet targets

Now, how do you engage your suppliers to enable their renewable energy procurement & scope 2 reductions?



GOING BEYOND SCOPES 1 & 2

A successful supplier RE program can be broken down into key phases



Some key considerations:

- + How to segment suppliers / prioritize which ones to engage
- + How to encourage supplier participation / action (i.e., carrots and/or sticks)
 - + Has your organization done what it's asking its suppliers to do?



Renewable Energy Aggregation | APPLE, SAMSUNG, EBAY & SPRINT

Apple, Samsung, eBay and Sprint partner on supply chain renewable energy aggregation



THE BACKGROUND

Apple, Samsung Austin Semiconductor, eBay and Sprint decided to act jointly to purchase renewable energy in the ERCOT market

- + Mobilized around tackling Scopes 2 & 3 together
- + Common corporate renewable energy goals
- + Similar timing requirements
- + Desire to make an impact with their purchase

HOW WE HELPED



Sourced optimal project size, technology, location, economics and timing



Supported each company's unique needs



Ensured all four buyers were ready to move cohesively together: procurement through contract execution



Thank you

BRIANA AMOROSO

Manager, Energy & Climate Practice – Power Markets

bamoroso@3degrees.com













Tom Raymond

Inspired People. Inspired Food.

Director of Environmental Sustainability

























































































































DRIVING AMBITIOUS CORPORATE CLIMATE ACTION







Panel Discussion



Audience Questions?