

Case Studies of Carbon Footprinting

Participant Polling Q & A

The following polling questions were presented to attendees at the beginning of the webinar, prior to the presentations, and then again at the conclusion of the webinar. The purpose of this exercise was to evaluate participants' learning as a result of this webinar. The correct answers are written in **green** below:

1. Is RGGI mandatory or voluntary, and which entities currently report?

- Mandatory / Industry in 10 NE and mid-Atlantic states
- **Mandatory / Power sector in 10 NE and mid-Atlantic states**
- Voluntary / Power sector in 10 NE and mid-Atlantic states
- Voluntary / Large emitters in 10 NE and mid-Atlantic states

Explanation: The Regional Greenhouse Gas Initiative (RGGI) is a mandatory, market-based program intending to cap CO₂ emissions from fossil-fuel fired power plants, and allow them to trade emission allowances. Currently, the RGGI only requires that fossil-fuel fired power plants report. For more information, see: www.rggi.org/home.

2. In accounting for GHGs emitted from electricity generation, which of the following emission factors is the most viable?

- **Local emission factor for energy mix**
- Regional emission factor for energy mix
- State-wide emission factor
- Averaged national emission factor

Explanation: The emission factor that is used for reporting purposes will be dictated by the reporting standard. So, in reality, all answers could be correct, depending on circumstances. However, the most accurate result for greenhouse gas emissions from electricity consumption would result from using a local emission factor. In the case of the Department of Energy (webinar case study presentation), PNNL was required to use a sub-regional emissions factor, utilizing data from eGRID.

3. Which of these is NOT a Scope 1 or Scope 3 emission?

- Emissions from use of a company-owned forklift
- Fugitive emissions from a non-energy source
- **Purchased wind power**
- Delivery fleet
- Waste disposal (including recycling and composting)

Explanation: Scope 2 includes **indirect** greenhouse gas emissions – from purchased electricity and steam. Note, however, that wind energy technologies produce electricity with a very low life-cycle global warming impact. For this reason, purchasing wind power (or other renewable energy) can be a Scope 2 emission, but it is also an emissions reduction opportunity because it generates less greenhouse gas emissions compared to fossil-fuel-based electricity sources.

4. Which activity (from the list below), does NOT result in actual emissions reduction for a company?

- Switching to fuel-efficient vehicles in company fleet
- **Purchasing offsets**
- Upgrading insulation
- Increased recycling and composting diversion
- Installing solar panels

Explanation: Purchasing offsets is a mitigation strategy, rather than a direct reduction in a companies' footprint. All of the other activities above will result in a direct reduction of greenhouse gas emissions. *(Note that this assumes all other operations stay the same. That is to say, if a company upgrades insulation in a heated or cooled space, but does not increase square footage, there will be a direct reduction in greenhouse gas emissions over time. Or, if a business replaces an equivalent number of inefficient vehicles with higher fuel-efficient vehicles but does not increase number of vehicles or significantly increase mileage, a reduction in direct greenhouse gas emissions will result).*