Scope of Emissions to Cover

YALE UNIVERSITY

Recommendations from Yale Presidential Carbon Charge Task Force

In its report to the president and provost of Yale University, the Carbon Charge Task Force confronted the challenge of which emissions to include in Yale’s internal carbon pricing system. Answering this question is an essential step when developing a carbon charge. The task force found the following:

1. The Greenhouse Gas (GHG) Protocol developed by the World Resources Institute and World Business Council for Sustainable Development is “the most widely used international GHG accounting tool and categorizes all emissions into three scopes,” which the report explains:

   **Scope 1** Direct emissions from owned or controlled sources. This includes the onsite combustion of fossil fuels from power plants and the vehicle fleet.

   **Scope 2** Indirect GHG emissions from consumption of purchased electricity, heat, or steam.

   **Scope 3** Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. transmission and distribution losses) not covered in Scope 2, commuting, air travel, outsourced activities, waste disposal, etc.

2. On a university campus, Scope 3 emissions should be separated into two categories:

   **Scope 3A** Emissions embedded in supplies, materials, food purchased by the university, student/staff/faculty travel paid for by the university, on-campus construction, and waste disposal.

   **Scope 3B** Emissions embedded in commuting, off-campus housing, and student/staff/faculty travel not paid for by the university.

3. To be useful, a carbon charge must have wide coverage throughout an organization. Emissions should be (1) under the operational control of the institution, and (2) “easily calculated with current or [readily] modified information systems.”

4. At Yale, applying the two criteria above results in selection of all scope 1 and scope 2 emissions for which the university pays a utility bill.*

5. Scope 3A emissions should be included in the university’s carbon charge when data sources are of sufficient quality to make measurement reliable.

6. According to the report, “scope 3B emissions are beyond the control of Yale and therefore should not be included in the charge.”

*In principle, this includes energy generated and purchased to power buildings and fleet vehicles for which Yale is financially responsible. In practice, due to challenges in data acquisition, Yale’s carbon charge includes 259 buildings responsible for 70% of campus building-related emissions. It does not yet include the vehicle fleet.