SYLLABUS

SUMA PS5170: Sustainable Operations

Instructor information
Vance A. Merolla
Office Hours:

Course Overview
Leading and advancing sustainability within an organization’s operations requires a strategic and balanced approach. Focusing on the integration of a broad range of today’s sustainability drivers, in a manner consistent with the organization’s culture and business objectives, optimizes the chances for long term success. To that end, this course takes a broad high level approach at systematically analyzing opportunities to integrate sustainability at each step along a complex value chain. Specifically, students will be asked to assume the role of a sustainability professional within a private sector company, tasked with integrating various sustainability strategies, initiatives and tools into the fabric of the business.

Throughout the semester, the entire end-to-end value chain will be examined, however it is not the intent to conduct full in-depth technical analyses of each value chain area, rather we will look at sustainable operations from a high-level strategic management viewpoint, discussing integration opportunities and intersections related to: product design, procurement, distribution, direct operations (e.g. manufacturing, buildings), stakeholder engagement, product/service use and end-of-life disposition.

By considering the organization holistically, we will discuss analytical concepts and industry tools related to life cycle thinking, cost/benefit analyses, corporate sustainability strategies, and risk assessments. In addition to technical sustainability considerations such as climate change, energy, water and waste, students will learn to implement practical sustainability initiatives within operating organizations through innovative change management, culture change and other organizational strategies.

Importantly, students will be challenged to think concretely about making choices and balancing elements of sustainability in an overall business context, and communicate in concise written and oral formats to critical internal and external stakeholders.
Key Learning Objectives:
Sustainable Operations is a broad topic, applicable to nearly all sectors both public and private. This course will focus primarily on the private sector, however in order to address as many cross-sector themes as possible, we will look for meaningful operational sustainability elements applicable to most organizations, public and private. The primary learning objectives for students will include:

- Understand how to integrate business-driven Sustainable Operations across a value chain
- Learn to balance and align varying stakeholder (customers/consumers, NGOs, suppliers, employees and investors) expectations with business realities (both financial and cultural)
- Utilize life cycle thinking to prioritize sustainability efforts
- Gain practical experience in the application of various real-world sustainability tools related to carbon footprint analysis, energy efficiency, product sustainability, sustainable buildings, water risks and supplier engagement
- Learn to communicate Sustainable Operations implications and business benefits in simple, effective and authentic ways, and to present clear business-focused updates to executive management

Course Structure
As a way to help develop practical Sustainable Operations skills, the course will utilize three (3) distinct (fictional) private sector companies in the following business sectors: consumer goods, hospitality and food/beverage. Student teams will be assigned to these business sectors, and will be given real-world scenarios and data to utilize throughout the course. Team-based midterm and final presentations will be required as a way to share ideas and illicit discussion/debate on various strategies.

The course will be structured into the following main sections: Value Chain Analysis, Stakeholder Engagement and Sustainability Communications.

- **Value Chain Analysis**: we will begin by examining end-to-end operational aspects of sustainability through the lens of greenhouse gases (GHG), to help identify potential “hotspots” where focus might bring greatest value. This section will also cover: facility operations & manufacturing, procurement & logistics, and product use & end-of-life. Students will be challenged to complete assignments related to carbon footprint analysis, product sustainability and sustainable buildings (LEED).

- **Materiality & Stakeholder Engagement**: through critical analysis of varying internal and external stakeholder (customers/consumers, employees, NGOs, suppliers, and investors) expectations and material business issues, this section will provide the backdrop to formulate successful sustainable operations strategies. Utilizing the private sector organizations assigned, teams will be challenged to complete activities related to designing and developing more sustainable products, tackling high-impact NGO priorities, assessing supplier water and climate risks (using WRI tools), and responding to investor protocols and surveys (e.g. CDP, DJSI, TCFD).

- **Sustainability Communications**: in this final section of the course, we will focus on developing and sustainability communications. The importance of data management and validation will be discussed, as well as best practices in private sector companies “telling their stories” in simple,
effective and authentic ways. Student teams will be challenged to develop and present clear business-focused sustainability strategies (including goals, key metrics, and risks) in the form of Executive Management strategy summary slide presentations.

GUEST SPEAKERS: As a way to broaden the real-world aspects of the course, various industry practitioners will be invited to provide the class with their Sustainable Operations experiences and perspectives throughout the semester.

Course Schedule

- Week 1 (Sept 6) – Introduction to Sustainable Operations

Section 1: Value Chain Analysis

- Week 2 (Sept 13) – The Value Chain Footprint
- Week 3 (Sept 20) – Facility Operations: Energy & Waste
- Week 4 (Sept 27) – Sustainable Sourcing
- Week 5 (Oct 4) – Product Use and Packaging
- Week 6 (Oct 11) – MIDTERM TEAM PRESENTATIONS

Section 2: Materiality & Stakeholder Engagement

- Week 7 (Oct 18) – Materiality & Stakeholders
- Week 8 (Oct 25) – Customers/Consumers: Brand Purpose
- Week 9 (Nov 1) – Suppliers: Assessing Water & Climate Risks
- Week 10 (Nov 8) – Investors: Surveys and Standards
- Week 11 (Nov 15) – NGOs: Tackling high-impact priorities

Section 3: Sustainability Communications

- Thanksgiving Holiday (Nov 22) – no class
- Week 12 (Nov 29) – Telling your Sustainability Story effectively
- Week 13 (Dec 6) – Course Summary & Team Communications
- Week 14 (Dec 13) – FINAL EXAM: TEAM PRESENTATIONS

Method of Grading and Evaluation

1. Attendance and Class Participation – 10%
2. Individual Deliverables – 65%
3. Midterm – 10%
4. Final Exam Presentations – 15%

Grade Point System: the following identifies how points will be awarded and translated into letter grades for the course: A= 94-100, A-= 90-93, B+=87-89, B= 84-86, B-=80-83, C+=77-79, C=74-76, C-=70-73, D=66-69, F= 65 or lower

Course Assignments and Point Scoring

✓ Attendance & Class Participation (10 points)
Participation in class is a critical element of the course and therefore attendance to each class is mandatory. Students are expected to arrive on time, attend all classes, and to stay until the end of class...
unless they have notified the instructor at the beginning of the session that they will be leaving early. Unexcused absences will affect a student’s grade in the class.

✓ Individual Deliverables (65 points)
Five (5) individual deliverables will be assigned to students as follows:
1. GHG Value Chain Footprint (15 points)
2. TRUE Zero Waste analysis (10 points)
3. Science-based Climate Targets (10 points)
4. Supplier Water Risk Mapping (15 points)
5. Context-based Water Targets (15 points)

✓ Midterm & Final (25 points)
Two (2) team deliverables will be assigned to students as follows:
1. Midterm Team Presentations: Senior Management briefing on Value Chain Analysis (10 points)
2. Final Team Presentations: Sustainable Operations Strategy - Executive Summary (15 points)

Assignment Grading Criteria
A series of technical analyses and written management email memos will be assigned throughout the course. Additionally, two team oral presentations will be required.

Grading Criteria for Written Assignments:
- Evaluated on a scale of 100 points using the following guidelines: 20 points for spelling, grammar, and the overall quality and clarity of the writing. 20 points for adherence to assigned format. 60 points for data analysis (where applicable), persuasiveness and effectiveness in communicating all key messages and meeting the objectives of the assignment.

Grading Criteria for Verbal Presentations:
- The midterm and final team presentations will be graded on a scale of 100 points using the following guidelines: 20 points for technical analysis. 30 points for overall quality and clarity of written materials – including ppt slides. 50 points for overall quality and clarity of the verbal presentation – including adherence to format guidelines, delivering within the prescribed time limit, and presentation effectiveness as related to the assigned objectives.

Course Readings
A variety of sources including journal articles, videos, webinars and websites will be used throughout this course. Documents can be found either on Canvas or electronically. Readings should be completed prior to the appropriate session to help better inform the lecture and discussion.

Late Assignment Policy
Assignments are due on the dates/times identified. One letter grade will be deducted from any assignment submitted after the due date/time. No assignment will be accepted after return of graded results to the class or after in-class review of the assignments, as well as after the deadline for submitting final grades.

Incompletes
As outlined in the School’s grading and academic starts policy, "A grade of 'I' (incomplete) is a temporary grade indicating failure to complete assigned work. The mark is given only upon the request of the
student and at the discretion of the instructor. The student and faculty member must sign a completed 'Request for Grade of Incomplete Form' before the final class session. The 'I' must be removed within one year after the end of the semester in which the student received the grade. Students seeking an extension of this time limit must have the approval of the instruction and successfully petition of the director of their program. If no petition is made, or if the petition is unsuccessful, the grade is changed to an N-Permanent Incomplete- which remains on the student's permanent record.

**Academic Integrity**
The School of Continuing Education does not tolerate cheating and/or plagiarism in any form. Those students who violate the Code of Academic and Professional Conduct will be subject to the Dean’s Disciplinary Procedures. The Code of Academic and Professional Conduct can be viewed online: [http://ce.columbia.edu/node/217](http://ce.columbia.edu/node/217)

Please familiarize yourself with the proper methods of citation and attribution. The School provides some useful resources online; we strongly encourage you to familiarize yourself with these various styles before conducting your research: [http://library.columbia.edu/help/howto/endnote.html](http://library.columbia.edu/help/howto/endnote.html)

Violations of the Code of Academic and Professional Conduct will be reported to the Associate Dean for Student Affairs.

**Accessibility Statement**
Columbia is committed to providing equal access to qualified students with documented disabilities. A student’s disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the University’s Health Services website: [http://health.columbia.edu/services/ods/support](http://health.columbia.edu/services/ods/support)
Course Schedule Details

Week 1: Introduction to Sustainable Operations
The first class will be dedicated to personal introductions, discussing course approach & objectives, aligning expectations and previewing course materials & assignments.

This Week’s Objectives:
- Provide an overview of the Sustainable Operations course
- Align on class objectives, course structure, and grading
- Review business sector organizational profiles & course assignments
- Discuss Ray Andersen TED Talk

Preparation prior to class:
- View: TED Talk - The Business Logic of Sustainability; Ray Anderson (Feb 2009); 15:54min
- Review the three (3) fictitious organizational profiles assigned within the Consumer Goods, Hospitality, and Food/Beverage sectors (.xls files posted on Canvas).

No Assignment this Week.
Course Section 1: Value Chain Analysis

Week 2: The Value Chain Footprint
We will examine end-to-end operational aspects of sustainability through the lens of greenhouse gases (GHGs), keeping in mind that this approach may also be applied equally to numerous sustainability aspects beyond climate. This exercise will highlight a strategy of identifying potential “hotspots” where focus may bring greatest business and environmental value.

This Week’s Objectives:
- Understand the importance of taking a holistic view at an operational footprint (in this case via GHGs) to help identify areas of focus aligned with business goals
- Review how to analyze basic operational energy usage data (e.g. Scope 1 & 2) and convert to GHG emissions
- Appreciate the wide range of impacts associated with end-to-end operational GHGs (e.g. Scope 3 emissions), and gain experience utilizing practical industry approaches and tools (e.g. GHG Protocol and WRI Scope 3 Analyzer)

Preparation prior to class:
- Read Ben & Jerry’s LCA Study overview http://www.benjerry.com/values/issues-we-care-about/climate-justice/life-cycle-analysis
- Review real-world company sustainability reports & corporate websites in the following business sectors (available online or Caspian):
  - Consumer Products: Colgate-Palmolive, Procter & Gamble, Unilever
  - Hospitality: Marriott, Wyndham Worldwide, Xanterra
  - Food/Beverage: Pepsico, Coca-Cola, Mondelez

Individual Assignment #1: GHG Value Chain Footprint (15 points) due Week 4
This assignment will utilize industry accepted practices and tools to develop a topline GHG Footprint analysis for direct (Scope 1), indirect (Scope 2) and other (Scope 3) GHG emissions. Students will use their assigned organization’s energy usage data and GHG factors provided to estimate the total annual GHG emissions associated with Scope 1 & 2 sources. Then, using the online World Resources Institute (WRI) Scope 3 Evaluator tool students will develop estimated GHG emissions associated with all 15 applicable categories of Scope 3 emissions.
Week 3: Facility Operations – Energy & Waste
Focus will be on understanding the importance, from both an environmental and economic perspective, of investing in energy reduction & efficiency, and renewable energy projects for your facility operations. Additionally, we will explore both technical and business opportunities related to operational waste reduction and green building strategies, by leveraging the USGBC’s TRUE Zero Waste and LEED certification programs.

This Week’s Objectives:

- To underscore the criticality of energy efficiency to Sustainable Operations
- Learn strategies to leverage cost to drive energy efficiency and renewable energy projects within an organization’s typical ROI
- Analyze a preliminary LEED Scorecard, including technical feasibility and cost implications, related to a newly proposed facility in your organization
- Discuss the USGBC’s TRUE Zero Waste certification program

Preparation prior to class:

- Visit USGBC website - [http://www.USGBC.org](http://www.USGBC.org)

Individual Assignment #2: LEED Scorecard & TRUE Zero Waste Analysis due Week 5
This assignment has students review a preliminary LEED v4 Scorecard and cost estimates from a LEED consultant, and provide recommendations related to sustainable building practice options for a new facility being built in India. Additionally, a basic review of the USGBC’s TRUE Zero Waste program and requirements will be included in the analysis and management recommendations.

Team Assignment #1: MIDTERM TEAM PRESENTATIONS – Value Chain Analysis: Senior Management Briefing due Week 6
Each of the teams will prepare and present a 12-minute Senior Management briefing summarizing their Value Chain GHG Footprint findings, peer benchmarking observations, and recommendations related to sustainable operations areas of focus which would bring greatest business value. The presentations will be followed by a 5-minute question/answer session.
Week 4: Sustainable Sourcing

Organizations engaged in sustainability must think and act beyond the walls of their own operations. Utilizing the results from the GHG footprint exercise conducted for our organizations, we will examine and discuss the opportunities related to suppliers and materials.

This Week’s Objectives:

- Review the results of the GHG Footprint exercise assigned in Week 2 with focus on the Supplier aspects
- Discuss the business importance, challenges, risks, strategies and practicalities of engaging suppliers in sustainability
- Discuss Deforestation as a dynamic model of supplier engagement for companies, NGOs and governments

Preparation prior to class:

Supplier Engagement
- Read Harvard Business Review article The Sustainable Supply Chain by Steven Prokesch https://hbr.org/2010/10/the-sustainable-supply-chain
- Visit CDP Supply Chain website - https://www.cdp.net/supplychain

Deforestation
- Visit website – WRI Forests; http://www.wri.org/our-work/topics/forests
- Visit website – WWF deforestation; https://www.worldwildlife.org/threats/deforestation
- Visit website – The Forest Trust; http://www.tft-earth.org/

No Assignment this Week.
**Week 5: Product Use and Packaging**

The sustainability impacts stemming from the use and disposal of an organization's products and/or services can often be significant. Product design and material/ingredient choices combined with sourcing decisions affect the overall sustainability profile of an organization as well as enable/disable the ability of suppliers, manufacturers and consumers to reduce their impacts. This week we will examine the both the internal and external aspects of sustainable product design.

**This Week's Objectives:**

- Review the LEED Scorecard and TRUE Zero Waste Analysis assignment from Week 3
- Examine product sustainability aspects related to the design, use and disposal of an organization's products and/or services

**Preparation prior to class:**

  [https://hbr.org/2012/10/a-new-algorithm-for-fast-carbo/](https://hbr.org/2012/10/a-new-algorithm-for-fast-carbo/)
- Visit website – US EPA Safer Choice (formerly Design for the Environment)  
  [http://www2.epa.gov/saferchoice](http://www2.epa.gov/saferchoice)
- Visit website - Closed Loop Fund  
- Visit website – How2Recycle  
  [http://www.how2recycle.info/](http://www.how2recycle.info/)
- Visit website – Sustainable Packaging Coalition  
  [https://sustainablepackaging.org/](https://sustainablepackaging.org/)

**Individual Assignment #3: Science-based Climate Target due Week 7**

In this assignment, students will be asked to set an absolute science-based greenhouse gas (GHG) reduction goal for Scope 1 & 2 emissions using the SBTi’s Sectoral Decarbonization Approach (SDA) as well as develop a Scope 3 target which conforms to SBTi guidance criteria.
Week 6: MIDTERM TEAM PRESENTATIONS – Value Chain Analysis: Senior Management Briefing

Each of the 6 teams will present a 12-minute Senior Management briefing summarizing their Value Chain GHG Footprint findings, peer benchmarking observations, and recommendations related to sustainable operations areas of focus which would bring greatest business value. The presentations will be followed by a 5-minute question/answer session.

**Note:** the Senior Management team has allotted only 12 minutes on their agenda for your briefing. Your presentations will be timed and the 12 minute limit will be strictly enforced, so not completing your presentation within the time limit will impact your grading evaluation.

No Assignment this Week.
Week 7: Materiality & Stakeholders

Following our analysis of the value chain in Section 1 of the course, we begin Section 2 with a focus on understanding material issues as well as key stakeholder agendas and expectations. Material issues have potentially significant implications related to a company’s risks and opportunities, making them critical elements for decision making, strategy setting and reporting. We will examine some approaches to materiality assessments and begin to integrate insights into our company strategies.

This Week’s Objectives:

- Review Assignment #3 on Science-based Climate Targets
- Transition from evaluating our footprints to understanding what issues are material to stakeholders both internally and externally
- Discuss Stakeholder Engagement within the context of understanding expectations and balancing with business realities and requirements
- Discuss various approaches to Materiality Assessments (GRI, SASB, IIRC)

Preparation prior to class:

- Read Materiality assessments: The missing link for sustainability strategy
  https://www.greenbiz.com/blog/2013/09/10/materiality-assessments-missing-link-sustainability-strategy
- Read GRI reporting guidance DEFINING MATERIAL ASPECTS AND BOUNDARIES: THE PROCESS, pages 32-39
- Review GRI/ROBECOSAM document on Metals, Mining and Electric Utilities sectors
- Review SASB Materiality Map
  https://www.sasb.org/materiality/sasb-materiality-map/

No Assignment this Week.
Week 8: Customers/Consumers: Brand Purpose

This week we will listen to what our customers and consumers are telling us about sustainability in terms of expectations and relevance, and discuss how best to integrate those in balance with other business drivers. Additionally, we will explore the connections and opportunities related to integrating sustainability into a brand's purpose.

This Week’s Objectives:

- Utilize the GHG Footprint developed in Section 1 to examine the impacts stemming from Consumer Use of Products/Service
- Discuss the organization's role in helping customers/consumers reduce their footprints
- Explore approaches to integrate sustainability into Brand Purpose models

Preparation prior to class:

- Read: 5 Amazing Examples of Brands Purpose [https://www.huffingtonpost.com/jeff-charles/5-amazing-examples-of-bra_b_10107212.html](https://www.huffingtonpost.com/jeff-charles/5-amazing-examples-of-bra_b_10107212.html)

No Assignment this Week.
Week 9: Suppliers: Assessing Water & Climate Risks

Sustainable Operations are critically dependent upon understanding and managing the risks throughout the supply chain. This week we will examine approaches to analyzing and addressing water and climate risks associated with key material/service suppliers. An exercise using a real-world tool (World Resources Institute Aqueduct Water Risk mapping tool) will be included.

This Week’s Objectives:

- Discuss Stakeholder Engagement within the context of how best to partner with suppliers to gather critical input used to inform the assessment of current and future risks
- Understand the criticality of assessing and managing water and climate related risks associated with suppliers
- Learn the application of a real-world analytical tool (WRI’s Aqueduct Water Risk mapping) in the supplier evaluation and selection process

Preparation prior to class:

- Visit WRI Aqueduct website - [http://www.wri.org/our-work/project/aqueduct](http://www.wri.org/our-work/project/aqueduct)

Individual Assignment #4: Supplier Water Risk Mapping due Week 11

In this assignment, students will utilize WRI’s online Aqueduct water risk tool to map out the locations of 3 potential new suppliers in China, obtain water risk data associated with these supplier locations, and then summarize the findings and report back to the Global Procurement team with relevant graphs/tables and recommendations.
Week 10: Investors - Surveys and Standards

As sustainability becomes more deeply embedded into global business practices, the investment community is taking an increasingly active role. This week we will discuss how sustainable operations intersect with investor and shareholder expectations from both risk management and value creation perspectives. We will review some leading investor-facing initiatives (e.g. TCFD), surveys (e.g. CDP), and some emerging sustainability accounting standards (e.g. SASB) to help frame the discussion.

This Week’s Objectives:

- Understand how investors view sustainability from both the risk management and value creation perspectives
- Through review of the CDP investor initiatives, gain an understanding of the breadth and depth of issues related to how institutional investors may act to reduce the long-term risks arising from environmental and social externalities
- Discuss investors as key stakeholders in driving sustainability, as well as how emerging accounting standards help to provide critical governance and support

Preparation prior to class:

- Visit CDP website - [https://www.cdp.net/](https://www.cdp.net/)

Team Assignment #2: FINAL TEAM PRESENTATIONS – Sustainable Operations Executive Summary due Week 14

(Submit PPT files on Wednesday Week 14 by 6pm, present to class on Thursday Week 14)

As a more comprehensive followup to the executive briefing conducted in Week 6, each of the 6 teams will now prepare and present a 20-minute Senior Management update summarizing their Sustainable Operations findings and recommendations, followed by a 5 minute question/answer session. With the limited amount of time, teams should focus their presentations on high-level learnings, strengths, opportunities and recommendations from the Value Chain Analysis, Stakeholder Engagement and Sustainability Communications work conducted this semester. The audience includes your organization’s CEO and COO, as well as management team leaders from finance, procurement, manufacturing/operations, human resources, corporate communications and sustainability.
Week 11: NGOs - Tackling high-impact Priorities

Organizations today engage with an increasing array of non-government organizations (NGOs) dedicated to driving various sustainability agendas. This week we will survey the current external NGO landscape, examine the business connections to the value chain, and discuss beneficial NGO engagement strategies.

This Week's Objectives:

- Review Assignment #4 on Supplier Water Risk Mapping
- Understand the role of NGOs in driving Sustainable Operations, and survey the current external landscape
- Through examination of our value chain model, discuss which NGO issues are most relevant to Sustainable Operations
- Discuss various strategies in balancing NGO engagement with overall business risks & goals

Preparation prior to class:

- Read Guide to Successful Corporate-NGO Partnerships; GEMI/EDF
- Visit World Resources Institute (WRI) website; [http://www.wri.org](http://www.wri.org)
- Visit Environmental Defense Fund (EDF) website; [https://www.edf.org/](https://www.edf.org/)
- Visit Greenpeace website; [http://www.greenpeace.org/usa/](http://www.greenpeace.org/usa/)
- Review: EXPLORING THE CASE FOR CORPORATE CONTEXT-BASED WATER TARGETS
  [https://www.ceowatermandate.org/files/context-based-targets.pdf](https://www.ceowatermandate.org/files/context-based-targets.pdf)

Individual Assignment #5: Context-based Water Targets due Week 12

In this assignment students will work to develop a context-based water target. More companies than ever are setting water targets, yet global water stress continues to rise. Since water issues are predominantly local, each basin has unique challenges that need to be considered when managing its water resources. Context-based metrics and targets recognize the particular challenges present in each basin, allowing for physical and social thresholds and tracking water use relative to basin thresholds and availability.
Course Section 3: Sustainability Communications

Week 12: Telling your Sustainability Story effectively
As organizations work to develop sustainability strategies and initiatives, reporting and communicating is essential to ensuring stakeholders at all levels have the clear information they need and expect. This week we will discuss the importance of meaningful, authentic and transparent public reporting, and what strategies to consider when developing a sustainability communications plan.

This Week’s Objectives:
- Review the Context-based Water Targets assignment #5 from Week 11
- Appreciate the importance of meaningful, authentic and transparent sustainability reporting
- Ensure sustainability reporting is kept simple and clear for all stakeholders

Preparation prior to class:

No Assignment this Week.
Weeks 13: COURSE SUMMARY & TEAM COMMUNICATIONS – Sustainable Operations

The final class will be dedicated to summarizing key topics and learnings from the course, reviewing original objectives, and having an open class discussion on a selected sustainability "hot" topic and/or case study.

Time will also be provided to review final presentation expectations and for the Teams to meet together in class, as well as gather input from the professor and teaching assistants as they prepare for the presentations next week.

This Week’s Objectives:

- Conduct a course overview focused on the original objectives, as well as key learnings
- Open class discussion on a sustainability "hot" topic or case study (based on student survey)
- Discuss expectations for Final Presentations next week, and provide time for Teams to meet in class to prepare, as needed

No Assignment this Week.

Weeks 14: FINAL TEAM PRESENTATIONS – Sustainable Operations Strategy Executive Summary (*extended class time from 6:10pm to 9:00pm)

Each of the 6 teams will present a 20-minute Senior Management update summarizing their Sustainable Operations findings and recommendations, followed by a 5-minute question/answer session. With the limited amount of time, teams should focus their presentations on high-level learnings, strengths, opportunities and recommendations from the Value Chain Analysis, Stakeholder Engagement and Sustainability Communications work conducted this semester. The audience includes your organization’s CEO and COO, as well as management team leaders from finance, procurement, manufacturing/operations, human resources, corporate communications and sustainability.

Note: the Senior Management team has allotted only 20 minutes on their agenda for your briefing. Your presentations will be timed and the 20 minute limit will be strictly enforced, so not completing your presentation within the time limit will impact your overall assignment evaluation.