

# INNOVATE

## TO RIDE THROUGH

the toughest Enterprise Learning Challenges

### CHALLENGE STATEMENT #03

#### 1. Challenge Owner Index and Pseudonym

##### #03 – Sustainable Innovation Corp

#### 2. Challenge Statement

We are an environmental sustainability change management firm who is interested in the integration of sustainability skills into the jobs of the future, and to shine a light on how sustainability could impact how workers of the near future would decide on the companies they work for.

The solution that we are looking for is a collection of insights from ground research and a blended-learning implementation of imparting sustainability skills in different companies with a high potential of sustainable impact (specifically those that can make a positive change in tackling carbon emissions, pollution, and resource depletion in Singapore and the region).

The bigger goal is to consolidate the insights gained from the challenge into a playbook for how companies can integrate the vocationalization of sustainability into their learning and development strategy.

#### 3. About the Challenge Owner Organisation

We are a Sustainable Innovation Corp provides insights into change management related to integrating environmental sustainability into businesses.

#### 4. Define the Challenge

Sustainability is not a new concept, but with the introduction of the sustainable development goals in 2015, coupled with a renewed appreciation for the importance of companies aligning on Environmental, Social and Governance (ESG) metrics, and with the recent announcement of Singapore's Green Plan 2030, the time is right to look at the role of sustainability in the new Singaporean economy.

The environmental impact is something that is increasingly resonating with younger Singaporeans in (or entering) the workforce. It has been shown back in 2019 that 9 in 10 Singaporeans between 18 – 34 years old would “do their part for the environment”, and many have expressed that they expect government and corporations (incidentally, two of the biggest employers) to “do more” to combat climate change.

We believe that it is important for sustainable impact to be driven by employers, specifically to tackle carbon emissions, pollution, and resource depletion. Specifically, there are several indicators from the United Nations Sustainable Development Goals (SDGs) [3] that are of particular interest to us:

#### SDG 2: Zero Hunger

- 2.1.2: Prevalence of food insecurity
- 2.4.1: Sustainable food production

#### SDG 3: Good Health and Wellbeing

- 3.9.1: Mortality rate from air pollution

#### SDG 6: Clean Water and Sanitation

- 6.3.2: Ambient water quality
- 6.4.1: Water use efficiency
- 6.5.1: Integrated water management

#### SDG 7: Affordable and Clean Energy

- 7.2.1: Renewable energy
- 7.3.1: Energy efficiency
- 7.A.1: Access and investments in clean energy

#### SDG 11: Sustainable Cities and Communities

- 11.6.2: Urban air pollution

#### SDG 12: Responsible Consumption and Production

- 12.2.1: Material footprint
- 12.3.1: Global food loss
- 12.4.2: Hazardous waste generation
- 12.5.1: Recycling rates
- 12.6.1: Companies publishing sustainability reports

#### SDG 13: Climate Action

- 13.3.1: Education on climate change
- 13.3.2: Capacity-building for climate change

The challenge, however, is that most of the effort that goes into changing companies to become more sustainable happens at the upper leadership level, with the intention for environmental sustainability to flow down through the rest of management, and eventually the rest of the workforce. This may or may not happen, and with nearly 40% of millennials surveyed in US companies specifically citing their choice of job as based on a company's sustainability performance compared to their competitors, it is only a matter of time before millennials in Singapore demand for sustainability to be not just a big part of the company they work in, but also the way they work in their companies.

To work out how environmental sustainability can be embedded in workplace learning and workplace practices in key sectors (elaborated upon below), this should come in the form of:

- Ground research to be carried out, and report to be created in order to give insights into decision makers and policy makers, including interesting case studies
- Besides publishing the report, to prototype and trial with at least 10 employees in 3 companies (from different sectors) the best learning experiences that will bring about the

sound acquisition of the sustainability competencies and skills for the companies involved in this challenge.

An example of how the above can be executed is as follows:

- Flesh out “Environmental Sustainability” as a Critical Core Skill, integrate it into one of the three clusters, and create curriculum on how to get working adults to appreciate environmental sustainability and its relevance to all industries. SDG 13 would be a good example of what should be included in an industry-agnostic curriculum.
- Identify relevant SDG targets to each of the 3 industries. Taking Data Centers (which consumes 7% of Singapore’s total energy [4]) as an example, SDG 7 and relevant technical knowledge on how to increase energy efficiency through procuring clean energy for the data centers, or integrating more efficient cooling, or more energy efficient computational processes.

*(Note that the above represents an example of how to tackle a learning challenge, and it is not meant to be the “answer” as to how to go about tackling this challenge.)*

## 5. Requirements

With so many sectors active in Singapore, we would want to prioritize those that will be able to provide the highest mileage for environmental sustainability to be mainstream in workplace learning. We have identified several sectors which believe has the potential to have significant potential to reduce carbon emissions, design out pollution, and/or tackle resource depletion:

- Design and manufacturing
- Data centers and ICT
- Cleantech

The solution provider should have familiarity, reach, and network in the above sectors we have identified. In total, a minimum of 9 companies (3 companies from 3 sectors) should be part of the initial ground research.

Should they propose an industry outside of the 3 we identified, their justification of including the industry will also be evaluated.

The solution will be evaluated on the methodology’s innovativeness and attention to best pedagogical practices.

## 6. Targeted Learners / Users

3-5 companies in at least 3 of the impact sectors to be part of the initial ground research. Ideally each company has a minimum of 50 staff. All companies require a local UEN in Singapore.

## 7. Deliverables

1. Feasibility study report of integrating environmental sustainability into skills frameworks across at least 3 industries in Singapore, why they matter, and what are potential downstream effects.
2. With inputs from the feasibility study in (1), to prototype a set of targeted workplace training / learning interventions that will enable the sound development of the required (new)

sustainability skills and competencies the 9 companies will find relevant for their businesses; covering these objectives.

- a) Understanding closely the environmental costs and benefits of the current practices of the company
- b) Identifying key skills in existing roles, or identifying new roles required by the company to tackle these costs or amplify their benefits

The interventions *may* be in the form of courses incorporating relevant blended instructional methodologies, but we remain open to any intervention means that will be the most effective. The solutionist will need to create a suite of learning approaches, and test and trial them with 3 companies for learning efficacies and outcomes.

3. Outcome and future recommendations report inclusive of the outcomes of the learning process, and feedback from (and assessment of) the employees going through the learning process.
  - a) For example: Because A did this, they have changed/improved it from this to that. And these are the workplace learning *activities/skills/courses/trainings/ redevelopment plans* that staff must go through.

## 8. Measures of Success

If the challenge is solved, three things will happen:

1. It will provide an actionable plan for industries (in which the 3 industries/sectors are a part of) to integrate vocational environmental sustainability learning in their companies.
2. It will provide a clear guide on how to evaluate and map out steps to vocationalise environmental sustainability for industries not covered in this challenge.
3. It will provide a playbook for how to integrate other aspects of sustainability (social, governance) into the working level of a company.

Elements from both the initial report and the blended learning initiative will form the foundation of a whitepaper or playbook that will be used for future initiatives in other industries in Singapore.

Finally, as an added value, our company will be able to integrate these insights into our digital platform so as to inform our own strategy to nurture sustainability talent in Singapore and around the region.