



O2/A2: Handbook Manual of the Simulation-Based Training



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Contents

Executive Summary in English	3
Executive Summary in Greek	12
Executive Summary in Italian	22
Executive Summary in Spanish	32
Executive Summary in Czech	41
1. Introduction	48
2. Scope of the Handbook	49
3. Target Group	50
4. Added Value – Motivation	50
5. Structure of the role-playing simulation training	52
6. Simulation Scenarios	53
Scenario 1	53
Scenario 2	65
Scenario 3	77
Scenario 4	86
7. Facilitation of the Role-playing Simulation Training	102
ANNEXES	106
References	163

Executive Summary in English

Given that climate change is one of the most pressing challenges that global society is facing today, actions can and must be taken to reduce its negative effects on economic development, social progress and environmental sustainability. Companies, and especially the small- and medium-sized enterprises (SMEs), have a critical role to play in this climate change challenge, leading the way towards a healthy and more sustainable future by putting a lot of effort to reduce their GHG emissions and waste production, use energy efficiently and apply more green practices, that can actually save money and achieve economic growth.

However, companies, and particularly SMEs, lack the skills or competencies to set appropriate targets and act in the right direction for responding to climate change. More training is needed for them to turn green through reducing emissions and waste production, adopting CSR strategies and green policies, fostering innovation and green technology applications, or focusing on their staff training to use energy efficiently. They also need to receive proper guidance that will contribute to setting robust and credible targets in line with the current climate change expectations.

Towards this direction, trainers and VET providers can employ the GoGreen simulation-based training which can be proved very effective for the development of the necessary knowledge, skills and competencies of entrepreneurs related to the adoption and application of green practices, as well as enhance the cultivation of their attitudes towards the necessity of green transition. The overall objective of the IO2 training package of GoGreen is to equip VET providers and trainers with a ready to be used training material and guidelines, so as to be able to successfully implement simulation-based training activities addressing people from private entities and entrepreneurs to require knowledge, skills and competences so as to better understand the impacts of climate change and how to apply effective measures that mitigate those impacts in their businesses.

Scope of the Handbook

This handbook constitutes a tutor manual enclosing content of [four \(4\) different climate change scenarios](#). It introduces all necessary documents and material for the successful implementation of the simulation training, such as the description of the scenarios, and the [annexes](#), as well as the tools for the [evaluation of the simulation training](#). For each simulation scenario it presents:

The description of the Scenario

- Content (learning outcomes, duration, number of participants)
- Script (case, contextual details, roles)
- Case flow
- Lesson plan

The Annexes

- Trainees' handout
- Warm up activity
- Role cards
- Question sheets for roles
- Individual performance evaluation Sheet
- Extended information sheet
- Evaluation of the Simulation Training (common for all scenarios)

The handbook entails also a section about the “Facilitation of the Role-playing Simulation Training”.

Target Group

The present handbook is intended for trainers and VET providers, who wish to embed simulation-based practices in their teaching. It aims to help them advance their teaching methods, content and techniques, so as to provide learners (Private entities and entrepreneurs) with the required knowledge, skills and individual competences to better understand the impacts of climate change and apply effective measures for mitigating such impacts.

Added Value – Motivation

A crucial element of role-playing simulation is the elaboration and analysis of differing scenarios, which allow potential action strategies to be developed and discussed in a realistic manner, but within a safe and supervised educational environment at the same time (Salas, Wildman & Piccolo, 2009). They represent future problematic areas and difficult situations, or current deficiencies within the system, to which players (learners) are expected to respond (Waxman, 2010). The task for the participants is to articulate ideas, information and arguments in a way that is consistent with their role given. Within such a framework the tutor maintains strong control over the focus of the role-playing, while allowing participants to explore the role through their control over the exact language of the speech (Salas et al., 2009; Waxman, 2010). According to Alden (2000), the most precious benefit deriving from this form of training is that it gives scope for participants to reflect on their learning, while giving the instructor security from the fear that the activity would “get out of hand” and wander from the desired focus of the role-playing.

The GoGreen simulation- based training involves role-playing simulations that are dealing with the impacts of climate change and the actions that companies can take to respond to this challenge. Both trainers and learners get familiar with the topic, in order to expound on the broader issue of Climate Change and its impacts, as well as companies’ various mitigation measures placed at the core of the scenarios’ content. The [four \(4\) scenarios](#) developed refer to respective and separate role-playing simulation activities, corresponding to the modules and competency areas identified within the GoGreen project. Each of the four scenarios has its own story and different challenges that focus on problems or cases appropriate to the discipline and course level. Through the simulation-based training, all participants (people from private entities and entrepreneurs) are expected to acquire deep knowledge, skills, and competences relative to the broader issue of climate change and its impacts. The simulation scenarios intend to develop also their critical thinking, problem-solving, negotiation, collaboration and decision-making skills. The four (4) scenarios are presented in the following graph.

GoGreen Scenarios

<p>Scenario 1: Business as Usual (No change at business policy)</p> <p>Duration: 2-3 hours</p>	<ul style="list-style-type: none"> •High Greenhouse Gas (GHG) emissions which affect the climate •Penalty/fined risk •Missed opportunities for cost reductions •Bad marketing image – No Corporate Social Responsibility (CSR)
<p>Scenario 2: The Company decides to invest in GHG Management – Energy Savings</p> <p>Duration: 2-3 hours</p>	<ul style="list-style-type: none"> •Measure and reduce GHG emissions •Reduce costs by saving energy policies/ technology applications •Increase Corporate Green Image •Avoid penalty-fines •Improve Competitive Advantage •Provide Stakeholders information
<p>Scenario 3: The Company decides to invest in staff behaviour about GHGs emissions and waste</p> <p>Duration: 2-3 hours</p>	<ul style="list-style-type: none"> •Reduce costs by training the staff on how to use efficiently energy •Raise awareness of energy consumption and waste production •Corporate Social Responsibility (CSR)
<p>Scenario 4: Mixture of 2nd and 3rd Scenarios</p> <p>Duration: 3 hours and 20 minutes</p>	<ul style="list-style-type: none"> •Measure and reduce GHG emissions - Reduce costs by saving energy policies – technology applications •Reduce costs by training the staff on how to use efficiently energy •Raise awareness of energy consumption and waste production. •Avoid penalty-fines •Increase Corporate Green Image •Improve Competitive Advantage – First mover advantage •Encourage Innovation of new green products and services •Provide Stakeholders information

The following table outlines the script for each of the four (4) scenarios developed for GoGreen and summarizes the basic guidelines about how to ensure the proper case flow.

Scenarios	Script
1. Business as Usual (No change at business policy)	A medium-sized accountancy company, providing cost-effective solutions, had a good reputation until recently regarding the quality of the services provided. Yet it is becoming a low-tech operator, not embracing technology or sustainability practices like its competitors. This starts to impact on customer retention and is not attracting new business clients. Its reputation is declining along with its CSR profile. It has no sustainability plans in place and is not moving towards a green business model. Its business practice is heavily reliant on paper, employees use paper to record every client engagement and transaction. People in the company are excellent record keepers and large consumers of paper and paper products. The company's lack of investment in ICT and e-conferencing facilities has brought a high estimated carbon footprint.
2. The Company decides to invest in GHG Management – Energy Savings	An agricultural SME in Greece has been dealing with wine-making and olive oil production and trade. Due to a change in the national business legislation about climate change, the company sees that GHG emissions and energy consumption are borderline legal. Hence, there is a high possibility in the near future to receive a financial penalty-fine for that. Also, the amount of waste produced by its activity has caused environmental deterioration in the regional ecosystem, which has been noticed by some nearby residents, partners and local authorities. The company decides to invest in GHG management and energy savings in order to mitigate the climate change impacts and improve its environmental footprint, rectify potential negative effects, guard its reputation and image, retain a decent level of collaboration with its stakeholders and stay on course towards sustainability and growth.
3. The Company decides to invest in staff behavior about GHGs emissions and waste	An advertising company that operates in Cyprus decides to alter the practices of its staff to be in line with a sustainable mission. It wishes to invest in corporate training with focus on its staff behavior. Employees will be trained on energy-saving and waste reduction practices that will benefit the company in terms of cost reduction and will create a culture of cost optimization and cost reductions to improve the overall strategy. Also, the company intends to focus on improving its CSR strategy, reputation and profile, by adopting a more responsible way of action. This will lead to improving its respective image in the market.

4. Mixture of 2nd and 3rd Scenario

A Tomato producer in the agricultural sector in Greece has its own growing and harvesting equipment and machinery. The company ownership (management) has recently been taken over by the 2nd generation of the founder family and the current management has an innovative thinking and strategic vision for the business. Being aware of the climate change and the actual framework and environmental impact of their business (energy consumption, waste production, fertilizers, pesticides, etc.) the owners wish to implement a project to reduce their business environmental footprint. Being aware that all business actors have a great impact, they want to invest in corporate training with focus on staff behavior to increase energy-saving and waste reduction practices that benefit the company in terms of cost reduction. The owners have planned a meeting with the staff representative and invited an environmental expert as an external professional to give advice, and a local representative to discuss their project about GHG management and energy savings and the staff training to reduce operating costs, mitigate climate change impacts and improve the environmental footprint of the business. A condition to be taken for granted pertains to that the company budget for such an investment is not without limitation, and the owners opt for the most cost-effective solution in every decision they have to make.

Guidelines for the case flow, common for all the four (4) scenarios.

- First, the facilitator introduces the case, then describes the key contextual details of the scenario and provides information of the roles to be played.
- The business owners are encouraged to initiate the role-playing, supporting their business interests.
- The rest of the delegates engage gradually in role-playing by the same token. All participants are allowed to advise their group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever needed.
- Some questions are asked to each group, so as to facilitate discussion and negotiations that will lead faster to the participants' final decisions about the scenario.

Structure of the role-playing simulation training

There are four distinct stages that a trainer should follow while implementing a role-playing simulation activity, these steps are described in details in the lesson plan of each scenario:

N	Stage	Description
1)	Initiation of the training	<p>The trainer communicates with all participants by distributing in advance the necessary material for them to study. This refers to:</p> <ul style="list-style-type: none"> a) the trainees' handout, and b) the extended information sheets <p>The material can be distributed a few days before implementing the role-playing simulation workshop. Depending on the skills level of participants and their prior background knowledge on the subject, the trainer can decide whether to distribute also in advance the "Role Cards" and the "Question Sheets for Roles", so as to better prepare the participants about the simulation training. Yet, this is without allocating any particular roles to the participants before the actual workshop takes place, since it is a task occurring in the next stage.</p>
2)	Preparation and explanation of the topic by the trainer	<p>This is the opening stage of the simulation training, where the trainer focuses on the theme, assigns roles, creates procedures, gathers all the necessary material, and starts arranging the classroom. This step requires good preparation from the trainer, who should take into account as many aspects of the theme as possible and provide explicit instruction of what is expected.</p>
3)	Trainees' preparation for involvement in the role-playing simulation	<p>Roles' assigning and instructions provided to participants. Explanation of the breakdown of the role-play simulation into specific tasks and time constraints. Adequate time should be given to trainees for researching their roles, asking questions and becoming comfortable with the scenario. Some may experience this kind of learning for the first time, thus, providing tips and/or examples is important. Instructors can give lectures or facilitate discussions that will offer further context and guidance prior to the main role-play simulation activity.</p>
4)	Actual role-playing simulation activity	<p>A degree of independent learning is both provided and expected. Yet, trainees still need to be guided during the activity. It is important to remind them of the rules, so that they stay in their roles or use appropriate communication skills. The trainer takes on the role of observer and interjects only if and whenever necessary.</p>

5)	Debrief Reflection	and	Before closing the role-play, the trainer should coordinate debrief, which contributes to gain further insight into decisions made and behaviors displayed. Based on feedback, trainers may elaborate on learning tasks, clarify misunderstandings, or make adjustments for future role-plays. The trainer acknowledges the overall emotional involvement of learners, whose self-reflection can be integrated throughout the role-play and after each session, so that the trainer has a better understanding and a more rounded picture of how the activity is going.
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Facilitation of the Role-playing Simulation Training

Tips for Briefing

The briefs for all participants of the role-playing should be unambiguous and totally in line with the objectives. You must use a clear introduction informing participants about the purpose of the game, the goals, and your own (and/or program-based) motives and situational definitions. Provide the background knowledge information on climate change that needs to be reviewed for the simulation, along with key themes and contextual details of the scenario. Be well-prepared by taking into account as many aspects of the theme as possible and focus on what is expected from trainees. You act as facilitator of the role-playing, introducing the game play and the simulation model, before officially opening the role-playing action. Adequate time should be given to trainees to read the scenario case, get familiar with their roles and ask questions. More information about these tips can be found [here](#).

Tips for actual Role-Play

Take on the role of observer and interject only if and whenever necessary. Despite being present, you will have no active role in the play. Let the simulation flow with each new pledge added. Invest time to hear proposal speeches from each delegate and monitor the simulation scenario run. Try to remain silent, minimize your advocacy and let the role-play do its work. Set enough time and space for the delegates (groups) to negotiate. Allow them to be engaged in multiple rounds of negotiations, so as to achieve objectives and reach a breakthrough agreement or solution (ideally by consensus). Your task is to set up actors to learn through the role-play, stretch themselves personally and engage as much as possible. It is important to remind them of the rules, so that they stay in their roles and/or use appropriate communication skills.

Tips for Debriefing

When negotiations have been concluded and final decisions have been made by actors, the debriefing discussion takes place. It is the most important stage of the simulation and it may take more time than the actual play (even twice as that). To save time during debrief, you may pose questions that apply to all, and wait for hands, or texting in the chat box, or votes by everyone. Another idea is to invite learners to take 1 minute of silence to reflect on future possibilities.

The evaluation activity is also part of the debriefing. It entails 2 separate questionnaires that should be completed by all participants (an individual performance evaluation sheet and a simulation training evaluation sheet). Explain to participants why this activity is important and make clear to them that the questionnaires are anonymous and must be completed individually, without any third-party

intervention. There are no right or wrong answers, and they should reply as frankly as possible based on their individual opinion.

Environment settings

Role-playing in class

For an in-person event, a quiet lecture room could be set up. While open space is also an option, it entails some risk in terms of distractions that may appear (weather conditions, environmental noise, difficulty of preparing and running the simulation role-play without the proper/special equipment required, etc.).

Role-playing online

For an online event, you can choose an online platform that you access to and are familiar with. However, the latter is needed for the actors as well, since it constitutes a determinant for the success of the role-playing. Also, you should take into consideration that an on-line event entails some minor risk in terms of distractions that may appear due to potential net disconnections or incompatible devices used by the participants, such as headphones and/or any other hardware that may consume time and force the simulation training to fall behind schedule. It is important that the online platform selected in the simulation offers the “breakout room” feature, so that delegates can decide privately within their own groups the argumentation and strategy to follow during negotiations.

Staff involved

As a trainer, you will be present to coordinate the simulation. Among your tasks is to listen closely to all of the actors’ speeches, demonstrating the sort of focus that you want others to employ. Amidst all the rhetoric, you note the specific actions that are being proposed and clarify whenever needed. Within your tasks is also to call on the group’s delegates and allocate time appropriately for the short presentation of their proposals. The order of teams you call on does not matter significantly, but calling first on the main character (i.e., the business owners) will help the case flow better. You also have the task to project a timer that all of the actors will be able to watch, so as to show that they will be cut off if they run over time. In addition, you should allow actors for only minimal additional rhetoric about the difficulty of the situation. Also, you have to be available to provide further explanations on the issues discussed. To accomplish all above, you should act as a facilitator, so you must be profoundly acquainted with each scenario, its case flow, the roles and characters, the personalities participating in each of the groups, the specific simulation parts and certainly the exact time schedule so as not to deviate from that.

Apart from participants, a technical expert might also be available to ensure the smooth carrying out of the play. The technical expert can support you if you are not well acquainted with arranging and preparing all necessary adjustments for the on-line platform to host the simulation. The expert may also be available to provide relevant support with the technical equipment whenever needed during the role-playing.

Equipment, Tools, Resources

Within the current handbook, there is also some useful information provided regarding the equipment, tools, and resources needed for the role-playing to be implemented. Note also that there are some special requirements to be considered, depending on whether the simulation training is taking place in a traditional class as an in-person event, or through an online platform as a virtual event. More information about these tips can be found [here](#).

Evaluation of the Simulation Training

The simulation training should be evaluated after the completion of the role-playing. For this purpose, a [questionnaire](#) has been developed and should be distributed to all participants. Note that the questionnaire is common for all the simulation scenarios.

Executive Summary in Greek

Δεδομένου ότι η κλιματική αλλαγή είναι μία από τις πιο μεγάλες προκλήσεις που αντιμετωπίζει σήμερα η παγκόσμια κοινωνία, μπορούν και πρέπει να ληφθούν μέτρα για τη μείωση των αρνητικών επιπτώσεων της στην οικονομική ανάπτυξη, την κοινωνική πρόοδο και την περιβαλλοντική βιωσιμότητα. Οι εταιρείες, και ιδίως οι μικρομεσαίες επιχειρήσεις (SMEs), έχουν έναν κρίσιμο ρόλο να διαδραματίσουν σε αυτή την πρόκληση της κλιματικής αλλαγής, δείχνοντας το δρόμο προς ένα υγιές και πιο βιώσιμο μέλλον, καταβάλλοντας μεγάλες προσπάθειες για να μειώσουν τις εκπομπές αερίων του θερμοκηπίου και την παραγωγή αποβλήτων, να χρησιμοποιούν αποτελεσματικά την ενέργεια και να εφαρμόζουν περισσότερες πράσινες πρακτικές, που μπορούν πραγματικά να εξοικονομήσουν χρήματα και να επιτύχουν οικονομική ανάπτυξη.

Ωστόσο, οι εταιρείες, και ιδίως οι μικρομεσαίες επιχειρήσεις, δεν διαθέτουν τις δεξιότητες ή τις ικανότητες να θέσουν τους κατάλληλους στόχους και να ενεργήσουν προς τη σωστή κατεύθυνση για την αντιμετώπιση της κλιματικής αλλαγής. Χρειάζεται περισσότερη εκπαίδευση για να γίνουν πράσινες μέσω της μείωσης των εκπομπών και της παραγωγής αποβλήτων, της υιοθέτησης στρατηγικών ΕΚΕ και πράσινων πολιτικών, της προώθησης της καινοτομίας και των εφαρμογών πράσινης τεχνολογίας ή της εστίασης στην εκπαίδευση του προσωπικού τους για την αποτελεσματική χρήση της ενέργειας. Πρέπει επίσης να λάβουν κατάλληλη καθοδήγηση που θα συμβάλει στον καθορισμό ισχυρών και αξιόπιστων στόχων σύμφωνα με τις τρέχουσες προσδοκίες για την κλιματική αλλαγή.

Προς αυτή την κατεύθυνση, οι εκπαιδευτές και οι πάροχοι κατάρτισης μπορούν να χρησιμοποιήσουν την εκπαίδευση με βάση την προσομοίωση GoGreen, η οποία μπορεί να αποδειχθεί πολύ αποτελεσματική για την ανάπτυξη των απαραίτητων γνώσεων, δεξιοτήτων και ικανοτήτων των επιχειρηματιών που σχετίζονται με την υιοθέτηση και εφαρμογή πράσινων πρακτικών, καθώς και να ενισχύσει την καλλιέργεια των απόψεών τους απέναντι στην αναγκαιότητα της πράσινης μετάβασης. Ο γενικός στόχος του εκπαιδευτικού πακέτου IO2 του GoGreen είναι να εφοδιάσει τους παρόχους κατάρτισης και τους εκπαιδευτές με ένα έτοιμο προς χρήση εκπαιδευτικό υλικό και κατευθυντήριες γραμμές, ώστε να είναι σε θέση να υλοποιήσουν με επιτυχία εκπαιδευτικές δραστηριότητες με βάση την προσομοίωση, οι οποίες απευθύνονται σε άτομα από ιδιωτικούς φορείς και επιχειρηματίες και απαιτούν γνώσεις, δεξιότητες και ικανότητες, ώστε τα εν λόγω άτομα να κατανοήσουν καλύτερα τις επιπτώσεις της κλιματικής αλλαγής και τον τρόπο εφαρμογής αποτελεσματικών μέτρων που μετριάζουν αυτές τις επιπτώσεις στις επιχειρήσεις τους.

Πεδίο εφαρμογής του εγχειριδίου

Το παρόν εγχειρίδιο αποτελεί ένα διδακτικό εγχειρίδιο που περιλαμβάνει το περιεχόμενο [τεσσάρων \(4\) διαφορετικών σεναρίων για την κλιματική αλλαγή](#). Παρουσιάζει όλα τα απαραίτητα έγγραφα και το υλικό για την επιτυχή υλοποίηση της εκπαίδευσης προσομοίωσης, όπως η περιγραφή των σεναρίων και τα [παραρτήματα](#), καθώς και τα εργαλεία για την [αξιολόγηση της εκπαίδευσης προσομοίωσης](#). Για κάθε σενάριο προσομοίωσης παρουσιάζει:

Η περιγραφή του σεναρίου

- Περιεχόμενο (μαθησιακά αποτελέσματα, διάρκεια, αριθμός συμμετεχόντων)
- Το σενάριο (περίπτωση, λεπτομέρειες πλαισίου, ρόλοι)
- Ροή του σεναρίου
- Σχέδιο μαθήματος

Τα Παραρτήματα

- Φυλλάδιο για τους εκπαιδευόμενους
- Δραστηριότητα προθέρμανσης
- Κάρτες ρόλων
- Φύλλα ερωτήσεων για τους ρόλους
- Φύλλο αξιολόγησης της ατομικής απόδοσης
- Επιπλέον φύλλο πληροφοριών
- Αξιολόγηση της εκπαίδευσης προσομοίωσης (κοινή για όλα τα σενάρια)

Το εγχειρίδιο περιλαμβάνει επίσης μια ενότητα σχετικά με τη [“Διευκόλυνση της εκπαίδευσης με προσομοίωση ρόλων”](#).

Ομάδα-στόχος

Το παρόν εγχειρίδιο απευθύνεται σε εκπαιδευτές και παρόχους κατάρτισης, οι οποίοι επιθυμούν να ενσωματώσουν στην διδασκαλία τους πρακτικές που βασίζονται στην προσομοίωση. Στόχος του εγχειριδίου είναι να τους βοηθήσει να προωθήσουν τις μεθόδους, το περιεχόμενο και τις τεχνικές διδασκαλίας τους, ώστε να παρέχουν στους εκπαιδευόμενους (ιδιωτικούς φορείς και επιχειρηματίες) τις απαιτούμενες γνώσεις, δεξιότητες και ατομικές ικανότητες για την καλύτερη κατανόηση των επιπτώσεων της κλιματικής αλλαγής και την εφαρμογή αποτελεσματικών μέτρων για τον περιορισμό των επιπτώσεων αυτών.

Προστιθέμενη αξία - Κίνητρα

Ένα κρίσιμο στοιχείο της προσομοίωσης ρόλων είναι η επεξεργασία και ανάλυση διαφορετικών σεναρίων, τα οποία επιτρέπουν την ανάπτυξη και συζήτηση πιθανών στρατηγικών δράσης με ρεαλιστικό τρόπο, αλλά ταυτόχρονα μέσα σε ένα ασφαλές και εποπτευόμενο εκπαιδευτικό περιβάλλον (Salas, Wildman & Piccolo, 2009). Αντιπροσωπεύουν μελλοντικές προβληματικές περιοχές και δύσκολες καταστάσεις ή τρέχουσες ελλείψεις στο σύστημα, στις οποίες οι συμμετέχοντες (εκπαιδευόμενοι) αναμένεται να ανταποκριθούν (Waxman, 2010). Το καθήκον των συμμετεχόντων είναι να αρθρώσουν ιδέες, πληροφορίες και επιχειρήματα με τρόπο που να συνάδει με τον ρόλο που τους έχει δοθεί. Μέσα σε ένα τέτοιο πλαίσιο, ο διδάσκων διατηρεί ισχυρό έλεγχο της εστίασης του παιχνιδιού ρόλων, ενώ επιτρέπει στους συμμετέχοντες να εξερευνήσουν το ρόλο μέσω του ελέγχου τους στην ακριβή γλώσσα του λόγου (Salas et al., 2009- Waxman, 2010). Σύμφωνα με τον Alden (2000), το πολυτιμότερο όφελος που απορρέει από αυτή τη μορφή εκπαίδευσης είναι ότι δίνει το περιθώριο στους συμμετέχοντες να αναστοχαστούν πάνω στη μάθησή τους, ενώ παρέχει στον εκπαιδευτή ασφάλεια απέναντι στον φόβο ότι η δραστηριότητα θα “ξεφύγει” και θα απομακρυνθεί από την επιθυμητή εστίαση του παιχνιδιού ρόλων.

Η εκπαίδευση βασισμένη στην προσομοίωση του GoGreen περιλαμβάνει προσομοιώσεις ρόλων που αφορούν τις επιπτώσεις της κλιματικής αλλαγής και τις δράσεις που μπορούν να αναλάβουν οι εταιρείες για να ανταποκριθούν σε αυτή την πρόκληση. Τόσο οι εκπαιδευτές όσο και οι

εκπαιδευόμενοι εξοικειώνονται με το θέμα, προκειμένου να αναπτύξουν το ευρύτερο θέμα της κλιματικής αλλαγής και των επιπτώσεών της, καθώς και τα διάφορα μέτρα περιορισμού της από τις εταιρείες που βρίσκονται στον πυρήνα του περιεχομένου των σεναρίων. Τα [τέσσερα \(4\) σενάρια](#) που αναπτύχθηκαν αναφέρονται σε αντίστοιχες και ξεχωριστές δραστηριότητες προσομοίωσης ρόλων, που αντιστοιχούν στις ενότητες και τους τομείς ικανοτήτων που προσδιορίστηκαν στο πλαίσιο του έργου GoGreen. Κάθε ένα από τα τέσσερα σενάρια έχει τη δική του ιστορία και διαφορετικές προκλήσεις που εστιάζουν σε προβλήματα ή περιπτώσεις κατάλληλες για το γνωστικό αντικείμενο και το επίπεδο του μαθήματος. Μέσω της εκπαίδευσης που βασίζεται στην προσομοίωση, όλοι οι συμμετέχοντες (άτομα από ιδιωτικούς φορείς και επιχειρηματίες) αναμένεται να αποκτήσουν βαθιά γνώση, δεξιότητες και ικανότητες σε σχέση με το ευρύτερο ζήτημα της κλιματικής αλλαγής και των επιπτώσεών της. Τα σενάρια προσομοίωσης σκοπεύουν επίσης να αναπτύξουν την κριτική σκέψη, την επίλυση προβλημάτων, τη διαπραγμάτευση, τη συνεργασία και τις δεξιότητες λήψης αποφάσεων. Τα τέσσερα (4) σενάρια παρουσιάζονται στο ακόλουθο γράφημα.

Τα Σενάρια του GoGreen

Σενάριο 1: Τυπική Επιχείρηση (Καμία αλλαγή στην επιχειρηματική πολιτική)

Διάρκεια: 2-3 ώρες

- Υψηλές εκπομπές αερίων του θερμοκηπίου (GHGs) που επηρεάζουν το κλίμα
- Κίνδυνος επιβολής κυρώσεων/προστίμων
- Χαμένες ευκαιρίες για μείωση του κόστους
- Κακή εικόνα μάρκετινγκ - Δεν υπάρχει Εταιρική Κοινωνική Ευθύνη (ΕΚΕ)

Σενάριο 2: Η εταιρεία αποφασίζει να επενδύσει στη διαχείριση των αερίων του θερμοκηπίου - Εξοικονόμηση ενέργειας

Διάρκεια: 2-3 ώρες

- Μέτρηση και μείωση των εκπομπών αερίων του θερμοκηπίου
- Μείωση του κόστους με πολιτικές εξοικονόμησης ενέργειας/ τεχνολογικές εφαρμογές
- Αύξηση της εταιρικής πράσινης εικόνας
- Αποφυγή κυρώσεων-προστίμων
- Βελτίωση του ανταγωνιστικού πλεονεκτήματος
- Παροχή πληροφοριών στα ενδιαφερόμενα μέρη

Σενάριο 3: Η εταιρεία αποφασίζει να επενδύσει στη συμπεριφορά του προσωπικού σχετικά με τις εκπομπές αερίων του θερμοκηπίου και τα απόβλητα.

Διάρκεια: 2-3 ώρες

- Μείωση του κόστους με την εκπαίδευση του προσωπικού για την αποτελεσματική χρήση της ενέργειας
- Αύξηση της ευαισθητοποίησης σχετικά με την κατανάλωση ενέργειας και την παραγωγή αποβλήτων
- Εταιρική Κοινωνική Ευθύνη (ΕΚΕ)

Σενάριο 4: Μίξη 2ου και 3ου σεναρίου

Διάρκεια: 3 ώρες και 20 λεπτά

- Μέτρηση και μείωση των εκπομπών αερίων του θερμοκηπίου - Μείωση του κόστους με πολιτικές για την εξοικονόμηση ενέργειας - τεχνολογικές εφαρμογές
- Μείωση του κόστους με την εκπαίδευση του προσωπικού στην χρήση της ενέργειας περισσότερο αποτελεσματικά
- Αύξηση της ευαισθητοποίησης σχετικά με την κατανάλωση ενέργειας και την παραγωγή αποβλήτων.
- Αποφυγή ποινών-προστίμων
- Αύξηση της εταιρικής πράσινης εικόνας
- Βελτίωση του ανταγωνιστικού πλεονεκτήματος - Πλεονέκτημα πρωτοπόρου
- Ενθάρρυνση της καινοτομίας νέων πράσινων προϊόντων και υπηρεσιών
- Παροχή πληροφοριών στα ενδιαφερόμενα μέρη

Ο ακόλουθος πίνακας περιγράφει το σενάριο για καθένα από τα τέσσερα (4) σενάρια που αναπτύχθηκαν για το GoGreen και συνοψίζει τις βασικές κατευθυντήριες γραμμές σχετικά με τον τρόπο διασφάλισης της σωστής ροής του σεναρίου.

Σενάρια

Υποθέσεις Σεναρίων

<p>1. Τυπική Επιχείρηση (Καμία αλλαγή στην επιχειρηματική πολιτική)</p>	<p>Μια μεσαίου μεγέθους λογιστική εταιρεία, που παρέχει λύσεις για οικονομική απόδοση, είχε καλή φήμη μέχρι πρόσφατα όσον αφορά την ποιότητα των παρεχόμενων υπηρεσιών. Ωστόσο, έχει αρχίσει να μετατρέπεται σε μια επιχείρηση χαμηλής τεχνολογίας, η οποία δεν υιοθετεί πρακτικές τεχνολογικές ή βιωσιμότητας όπως οι ανταγωνιστές της. Αυτό αρχίζει να επηρεάζει τη διατήρηση των πελατών και δεν προσελκύει νέους επιχειρηματικούς πελάτες. Η φήμη της μειώνεται μαζί με το προφίλ της ΕΚΕ. Δεν διαθέτει σχέδια βιωσιμότητας και δεν κινείται προς ένα πράσινο επιχειρηματικό μοντέλο. Η επιχειρηματική της πρακτική εξαρτάται σε μεγάλο βαθμό από το χαρτί, οι εργαζόμενοι χρησιμοποιούν κυρίως χαρτί για να καταγράφουν κάθε επαφή με τον πελάτη και κάθε συναλλαγή. Οι άνθρωποι στην εταιρεία είναι άριστοι κάτοχοι αρχείων αλλά καταναλώνουν μεγάλη ποσότητα χαρτιού και προϊόντων που είναι παράγωγα του χαρτιού. Η έλλειψη επενδύσεων της εταιρείας σε Τεχνολογίες Πληροφορίας και Επικοινωνίας (ΤΠΕ) και εγκαταστάσεις ηλεκτρονικών διασκέψεων έχει επιφέρει υψηλό εκτιμώμενο αποτύπωμα άνθρακα.</p>
<p>2. Η εταιρεία αποφασίζει να επενδύσει στη διαχείριση των αερίων του θερμοκηπίου - Εξοικονόμηση ενέργειας</p>	<p>Μια αγροτική μικρομεσαία επιχείρησης στην Ελλάδα ασχολείται με την παραγωγή και το εμπόριο κρασιού και ελαιολάδου. Λόγω της αλλαγής της εθνικής νομοθεσίας για τις επιχειρήσεις σχετικά με την κλιματική αλλαγή, η εταιρεία βλέπει ότι οι εκπομπές αερίων του θερμοκηπίου και η κατανάλωση ενέργειας είναι οριακά νόμιμες. Ως εκ τούτου, υπάρχει μεγάλη πιθανότητα στο εγγύς μέλλον να λάβει χρηματική ποινή - πρόστιμο για αυτό. Επίσης, η ποσότητα των αποβλήτων που παράγονται από τη δραστηριότητά της έχει προκαλέσει περιβαλλοντική υποβάθμιση στο περιφερειακό της οικοσύστημα, κάτι που έχει γίνει αντιληπτό από ορισμένους κατοίκους της περιοχής, συνεργάτες και τοπικές αρχές. Η εταιρεία αποφασίζει να επενδύσει στη διαχείριση των αερίων του θερμοκηπίου και στην εξοικονόμηση ενέργειας προκειμένου να περιορίσει τις επιπτώσεις της κλιματικής αλλαγής και να βελτιώσει το περιβαλλοντικό της αποτύπωμα, να διορθώσει τις πιθανές αρνητικές επιπτώσεις, να διαφυλάξει τη φήμη και την εικόνα της, καθώς και να διατηρήσει ένα αξιοπρεπές επίπεδο συνεργασίας με τα ενδιαφερόμενα μέρη της, παραμένοντας σε μια πορεία προς τη βιωσιμότητα και την ανάπτυξη.</p>
<p>3. Η εταιρεία αποφασίζει να επενδύσει στη συμπεριφορά του προσωπικού σχετικά με τις εκπομπές αερίων του θερμοκηπίου και τα απόβλητα</p>	<p>Μια διαφημιστική εταιρεία που δραστηριοποιείται στην Κύπρο αποφασίζει να αλλάξει τις πρακτικές του προσωπικού της, ώστε να είναι σύμφωνες με μια βιώσιμη αποστολή. Επιθυμεί να επενδύσει στην εταιρική εκπαίδευση με έμφαση στη συμπεριφορά του προσωπικού της. Οι εργαζόμενοι θα εκπαιδευτούν σε πρακτικές εξοικονόμησης ενέργειας και μείωσης αποβλήτων που θα ωφελήσουν την εταιρεία όσον αφορά τη μείωση του κόστους και θα δημιουργήσουν μια κουλτούρα βελτιστοποίησης και μείωσης του κόστους για τη βελτίωση της συνολικής στρατηγικής. Επίσης, η εταιρεία σκοπεύει να επικεντρωθεί στη βελτίωση της στρατηγικής, της φήμης και του προφίλ της στον τομέα της ΕΚΕ, υιοθετώντας έναν πιο υπεύθυνο τρόπο δράσης. Αυτό θα οδηγήσει στη βελτίωση της αντίστοιχης εικόνας της στην αγορά.</p>

4. Μίξη 2ου και 3ου σεναρίου

Ένας παραγωγός ντομάτας στον αγροτικό τομέα στην Ελλάδα διαθέτει δικό του εξοπλισμό και μηχανήματα καλλιέργειας και συγκομιδής. Η ιδιοκτησία της εταιρείας (διοίκηση) έχει πρόσφατα αναληφθεί από τη 2η γενιά της οικογένειας του ιδρυτή και η σημερινή διοίκηση έχει μια πιο καινοτόμο σκέψη και στρατηγικό όραμα για την επιχείρηση. Έχοντας επίγνωση της κλιματικής αλλαγής, του πραγματικού πλαισίου και των περιβαλλοντικών επιπτώσεων της επιχείρησής τους (κατανάλωση ενέργειας, παραγωγή αποβλήτων, λιπάσματα, φυτοφάρμακα κλπ.) οι ιδιοκτήτες επιθυμούν να υλοποιήσουν ένα σχέδιο για τη μείωση του περιβαλλοντικού αποτυπώματος της επιχείρησής τους. Γνωρίζοντας ότι όλοι οι επιχειρηματικοί παράγοντες έχουν μεγάλο αντίκτυπο, θέλουν να επενδύσουν στην εταιρική εκπαίδευση με έμφαση στη συμπεριφορά του προσωπικού για την αύξηση των πρακτικών εξοικονόμησης ενέργειας και μείωσης των αποβλήτων που ωφελούν την επιχείρηση από άποψη μείωσης του κόστους. Οι ιδιοκτήτες έχουν προγραμματίσει μια συνάντηση με τον εκπρόσωπο του προσωπικού και κάλεσαν έναν περιβαλλοντικό εμπειρογνώμονα ως εξωτερικό επαγγελματία για να δώσει συμβουλές, καθώς και έναν τοπικό εκπρόσωπο για να συζητήσουν το σχέδιό τους σχετικά με τη διαχείριση των αερίων του θερμοκηπίου, την εξοικονόμηση ενέργειας, την εκπαίδευση του προσωπικού για τη μείωση του λειτουργικού κόστους, τον μετριασμό των επιπτώσεων της κλιματικής αλλαγής και τη βελτίωση του περιβαλλοντικού αποτυπώματος της επιχείρησης. Μια προϋπόθεση που πρέπει να θεωρείται δεδομένη αφορά το γεγονός ότι ο προϋπολογισμός της επιχείρησης για μια τέτοια επένδυση δεν είναι απεριόριστος και οι ιδιοκτήτες επιλέγουν την πιο αποδοτική λύση σε κάθε απόφαση που οφείλουν να λάβουν.

Κατευθυντήριες οδηγίες για τη ροή του σεναρίου, κοινές και για τα τέσσερα (4) σενάρια.

- Αρχικά, ο συντονιστής εισάγει το σενάριο, στη συνέχεια περιγράφει τις βασικές λεπτομέρειες του σεναρίου και παρέχει πληροφορίες για τους ρόλους που πρέπει να διαδραματιστούν.
- Οι ιδιοκτήτες των επιχειρήσεων ενθαρρύνονται να ξεκινήσουν το παιχνίδι ρόλων, υποστηρίζοντας τα επιχειρηματικά τους συμφέροντα.
- Οι υπόλοιποι εκπαιδευόμενοι συμμετέχουν σταδιακά στο παιχνίδι ρόλων με την ίδια λογική. Όλοι οι συμμετέχοντες έχουν τη δυνατότητα να συμβουλευτούν τον εκπρόσωπο της ομάδας τους, τόσο πριν όσο και κατά τη διάρκεια του παιχνιδιού ρόλων, προσθέτοντας χρήσιμα σημεία-κλειδιά στη συζήτηση εάν και όποτε χρειάζεται.
- Σε κάθε ομάδα τίθενται ορισμένες ερωτήσεις, ώστε να διευκολυνθεί η συζήτηση και οι διαπραγματεύσεις που θα οδηγήσουν ταχύτερα στις τελικές αποφάσεις των συμμετεχόντων σχετικά με το σενάριο.

Δομή της εκπαίδευσης με προσομοίωση ρόλων

Υπάρχουν τέσσερα διακριτά στάδια που πρέπει να ακολουθήσει ένας εκπαιδευτής κατά την εφαρμογή μιας δραστηριότητας προσομοίωσης ρόλων, τα οποία περιγράφονται λεπτομερώς στο σχέδιο μαθήματος κάθε σεναρίου:

N	Στάδιο	Περιγραφή
1)	Έναρξη της εκπαίδευσης	<p>Ο εκπαιδευτής επικοινωνεί με όλους τους συμμετέχοντες, διανέμοντας εκ των προτέρων το απαραίτητο υλικό που πρέπει να μελετήσουν. Αυτό αναφέρεται σε:</p> <p>α) το φυλλάδιο των εκπαιδευομένων, και</p> <p>β) τα φύλλα επιπλέον πληροφοριών.</p> <p>Το υλικό μπορεί να διανεμηθεί λίγες ημέρες πριν από την υλοποίηση του εργαστηρίου προσομοίωσης ρόλων. Ανάλογα με το επίπεδο δεξιοτήτων των συμμετεχόντων και τις προηγούμενες γνώσεις τους σχετικά με το θέμα, ο εκπαιδευτής μπορεί να αποφασίσει αν θα διανείμει επίσης εκ των προτέρων τις “Κάρτες ρόλων” και τα “Φύλλα ερωτήσεων για τους ρόλους”, ώστε να προετοιμάσει καλύτερα τους συμμετέχοντες σχετικά με την εκπαίδευση προσομοίωσης. Ωστόσο, αυτό γίνεται χωρίς να κατανέμει συγκεκριμένους ρόλους στους συμμετέχοντες πριν από την πραγματοποίηση του πραγματικού εργαστηρίου, δεδομένου ότι αυτό είναι μια εργασία που λαμβάνει χώρα στο επόμενο στάδιο.</p>
2)	Προετοιμασία και επεξήγηση του θέματος από τον εκπαιδευτή	<p>Αυτό είναι το εναρκτήριο στάδιο της εκπαίδευσης προσομοίωσης, όπου ο εκπαιδευτής εστιάζει στο θέμα, αναθέτει ρόλους, δημιουργεί διαδικασίες, συγκεντρώνει όλο το απαραίτητο υλικό και αρχίζει να οργανώνει την αίθουσα διδασκαλίας. Αυτό το στάδιο απαιτεί καλή προετοιμασία από τον εκπαιδευτή, ο οποίος πρέπει να λάβει υπόψη του όσο το δυνατόν περισσότερες πτυχές του θέματος και να παρέχει σαφείς οδηγίες για το τι αναμένεται.</p>
3)	Προετοιμασία των εκπαιδευομένων για τη συμμετοχή τους στην προσομοίωση ρόλων	<p>Ανάθεση ρόλων και παροχή οδηγιών στους συμμετέχοντες. Επεξήγηση της κατανομής της προσομοίωσης ρόλων σε συγκεκριμένα καθήκοντα και χρονικούς περιορισμούς. Θα πρέπει να δοθεί επαρκής χρόνος στους εκπαιδευόμενους για να ερευνήσουν τους ρόλους τους, να κάνουν ερωτήσεις και να εξοικειωθούν με το σενάριο. Ορισμένοι μπορεί να βιώνουν αυτό το είδος μάθησης για πρώτη φορά, επομένως, η παροχή συμβουλών ή/και παραδειγμάτων είναι σημαντική. Οι εκπαιδευτές μπορούν να δώσουν διαλέξεις ή να διευκολύνουν συζητήσεις που θα προσφέρουν πρόσθετο περιεχόμενο και καθοδήγηση πριν από την κύρια δραστηριότητα προσομοίωσης ρόλων</p>
4)	Πραγματική δραστηριότητα της προσομοίωσης με ρόλους	<p>Προβλέπεται και αναμένεται να υπάρχει ένας βαθμός ανεξάρτητης μάθησης. Ωστόσο, οι εκπαιδευόμενοι εξακολουθούν να χρειάζονται καθοδήγηση κατά τη διάρκεια της δραστηριότητας. Είναι σημαντικό να τους υπενθυμίζετε τους κανόνες, ώστε να παραμένουν στους ρόλους τους ή να χρησιμοποιούν τις κατάλληλες επικοινωνιακές δεξιότητες. Ο εκπαιδευτής αναλαμβάνει το ρόλο του παρατηρητή και παρεμβαίνει μόνο εάν και όποτε χρειάζεται.</p>

5)	Απολογισμός/ Αποφώνηση και αναστοχασμός	Πριν κλείσει το παιχνίδι ρόλων, ο εκπαιδευτής θα πρέπει να συντονίσει την απολογιστική συζήτηση, η οποία συμβάλλει στην απόκτηση περαιτέρω γνώσης σχετικά με τις αποφάσεις που ελήφθησαν και τις συμπεριφορές που παρουσιάστηκαν. Με βάση την ανατροφοδότηση, οι εκπαιδευτές μπορούν να εμβαθύνουν στα εκπαιδευτικά καθήκοντα, να αποσαφηνίσουν παρανοήσεις ή να προβούν σε προσαρμογές για μελλοντικά παιχνίδια ρόλων. Ο εκπαιδευτής αναγνωρίζει τη συνολική συναισθηματική εμπλοκή των εκπαιδευομένων, των οποίων ο αυτο-αναστοχασμός μπορεί να ενσωματωθεί καθόλη τη διάρκεια του παιχνιδιού ρόλων και μετά από κάθε συνάντηση, έτσι ώστε ο εκπαιδευτής να έχει καλύτερη κατανόηση και μια πιο σφαιρική εικόνα για το πως εξελίσσεται η δραστηριότητα.
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Υποστήριξη της εκπαίδευσης προσομοίωσης ρόλων

Συμβουλές για την αρχική ενημέρωση

Οι οδηγίες για όλους τους συμμετέχοντες στο παιχνίδι ρόλων πρέπει να είναι σαφείς και απόλυτα σύμφωνες με τους στόχους. Θα πρέπει να χρησιμοποιήσετε μια σαφή εισαγωγή που να ενημερώνει τους συμμετέχοντες για τον σκοπό του παιχνιδιού, τους στόχους, καθώς και τα δικά σας κίνητρα (ή/και του προγράμματος) και τους προσδιορισμούς των συνθηκών. Παρέχετε πληροφορίες για τις βασικές γνώσεις σχετικά με την κλιματική αλλαγή που πρέπει να επανεξεταστούν για την προσομοίωση, μαζί με βασικά θέματα και λεπτομέρειες του περιεχομένου του σεναρίου. Να είστε καλά προετοιμασμένοι λαμβάνοντας υπόψη όσο το δυνατόν περισσότερες πτυχές του θέματος και να επικεντρωθείτε σε αυτό που αναμένεται από τους εκπαιδευόμενους. Ενεργήστε ως συντονιστής του παιχνιδιού ρόλων, παρουσιάζοντας το παιχνίδι και το μοντέλο προσομοίωσης, πριν ξεκινήσετε επίσημα τη δράση του παιχνιδιού ρόλων. Θα πρέπει να δοθεί επαρκής χρόνος στους εκπαιδευόμενους για να διαβάσουν την περίπτωση του σεναρίου, να εξοικειωθούν με τους ρόλους τους και να υποβάλουν ερωτήσεις. Περισσότερες πληροφορίες σχετικά με αυτές τις συμβουλές μπορείτε να βρείτε [εδώ](#).

Συμβουλές για το πραγματικό παιχνίδι ρόλων

Παίρνετε το ρόλο του παρατηρητή και παρεμβαίνετε μόνο εάν και όποτε είναι απαραίτητο. Παρά την παρουσία σας, δεν θα έχετε ενεργό ρόλο στο έργο. Αφήστε την προσομοίωση να κυλήσει με κάθε νέα δέσμευση που προστίθεται. Επενδύστε χρόνο για να ακούσετε τις ομιλίες προτάσεων από κάθε εκπρόσωπο και παρακολουθήστε την εκτέλεση του σεναρίου προσομοίωσης. Προσπαθήστε να παραμείνετε σιωπηλοί, ελαχιστοποιήστε την υποστήριξή σας και αφήστε το παιχνίδι ρόλων να κάνει τη δουλειά του. Ορίστε αρκετό χρόνο και χώρο για να διαπραγματευτούν οι εκπρόσωποι (ομάδες). Επιτρέψτε τους να εμπλακούν σε πολλαπλούς γύρους διαπραγματεύσεων, ώστε να επιτύχουν τους στόχους και να καταλήξουν σε μια επαναστατική συμφωνία ή λύση (ιδανικά μέσα από συναίνεση). Το καθήκον σας είναι να κάνετε τους συμμετέχοντες να μάθουν μέσα από το παιχνίδι ρόλων, να φτάσουν στα όριά τους προσωπικά και να εμπλακούν όσο το δυνατόν περισσότερο. Είναι σημαντικό να τους υπενθυμίζετε τους κανόνες, ώστε να παραμείνουν στους ρόλους τους ή/και να χρησιμοποιούν τις κατάλληλες επικοινωνιακές δεξιότητες.

Συμβουλές για την απολογισμό/αποφώνηση

Όταν ολοκληρωθούν οι διαπραγματεύσεις και ληφθούν οι τελικές αποφάσεις από τους συμμετέχοντες, πραγματοποιείται η συζήτηση για τον απολογισμό. Είναι το πιο σημαντικό στάδιο της προσομοίωσης και μπορεί να διαρκέσει περισσότερο χρόνο από την πραγματική δραστηριότητα του παιχνιδιού με ρόλους (ακόμη και τον διπλάσιο χρόνο). Για να εξοικονομήσετε χρόνο κατά τη διάρκεια του απολογισμού, μπορείτε να θέσετε ερωτήσεις που αφορούν όλους και να περιμένετε τα χέρια, ή μηνύματα στο πλαίσιο συνομιλίας, ή ψήφους από όλους. Μια άλλη ιδέα είναι να καλέσετε τους εκπαιδευόμενους να πάρουν 1 λεπτό για να σκεφτούν τις μελλοντικές δυνατότητες.

Η δραστηριότητα αξιολόγησης αποτελεί επίσης μέρος του απολογισμού. Περιλαμβάνει 2 ξεχωριστά ερωτηματολόγια που πρέπει να συμπληρωθούν από όλους τους συμμετέχοντες (ένα φύλλο αξιολόγησης της ατομικής απόδοσης και ένα φύλλο αξιολόγησης της εκπαίδευσης προσομοίωσης). Εξηγήστε στους συμμετέχοντες γιατί αυτή η δραστηριότητα είναι σημαντική και ξεκαθαρίστε τους ότι τα ερωτηματολόγια είναι ανώνυμα και πως πρέπει να συμπληρωθούν ατομικά, χωρίς καμία παρέμβαση τρίτων. Δεν υπάρχουν σωστές ή λανθασμένες απαντήσεις και θα πρέπει να απαντήσουν όσο το δυνατόν πιο ειλικρινά με βάση την προσωπική τους άποψη.

Ρυθμίσεις του περιβάλλοντος

Παιχνίδι ρόλων στην τάξη

Για μια εκπαίδευση δια ζώσης, θα μπορούσε να διαμορφωθεί μια ήσυχη αίθουσα διαλέξεων. Αν και ο ανοιχτός χώρος είναι επίσης μια επιλογή, ενέχει κάποιο ρίσκο όσον αφορά τις περιστάσεις που μπορεί να εμφανιστούν (καιρικές συνθήκες, περιβαλλοντικός θόρυβος, δυσκολία προετοιμασίας και διεξαγωγής του παιχνιδιού ρόλων προσομοίωσης χωρίς τον κατάλληλο/ειδικό εξοπλισμό που απαιτείται, κλπ.).

Παιχνίδι ρόλων διαδικτυακά (online)

Για μια διαδικτυακή εκπαίδευση, μπορείτε να επιλέξετε μια διαδικτυακή (online) πλατφόρμα στην οποία έχετε πρόσβαση και με την οποία είστε εξοικειωμένοι. Ωστόσο, το τελευταίο είναι απαραίτητο και για τους συμμετέχοντες, καθώς αποτελεί καθοριστικό παράγοντα για την επιτυχία του παιχνιδιού ρόλων. Επίσης, θα πρέπει να λάβετε υπόψη σας ότι μια διαδικτυακή εκπαίδευση ενέχει κάποιο μικρό ρίσκο όσον αφορά τις περιστάσεις που μπορεί να εμφανιστούν λόγω πιθανών αποσυνδέσεων του δικτύου ή ασύμβατων συσκευών που χρησιμοποιούν οι συμμετέχοντες, όπως ακουστικά ή/και οποιοδήποτε άλλο υλικό που μπορεί να καταναλώσουν χρόνο και να αναγκάσουν την εκπαίδευση προσομοίωσης να καθυστερήσει. Είναι σημαντικό η διαδικτυακή πλατφόρμα που επιλέγεται για την προσομοίωση να προσφέρει τη δυνατότητα των “ξεχωριστών χώρων” (breakout rooms), ώστε οι συμμετέχοντες να μπορούν να αποφασίζουν ιδιωτικά εντός των ομάδων τους την επιχειρηματολογία και τη στρατηγική που θα ακολουθήσουν κατά τη διάρκεια των διαπραγματεύσεων.

Εμπλεκόμενο προσωπικό

Ως εκπαιδευτής, θα είστε παρών για να συντονίσετε την προσομοίωση. Μεταξύ των καθηκόντων σας είναι να ακούτε προσεκτικά όλες τις ομιλίες των συμμετεχόντων, επιδεικνύοντας το επίπεδο της εστίασης που θέλετε να έχουν και οι υπόλοιποι. Μέσα σε όλη τη συζήτηση, σημειώνετε τις συγκεκριμένες ενέργειες που προτείνονται και παρέχετε διευκρινίσεις όποτε χρειάζεται. Μέσα στα καθήκοντά σας είναι επίσης να καλέσετε τους εκπροσώπους της κάθε ομάδας και να μοιράσετε κατάλληλα τον χρόνο για τη σύντομη παρουσίαση των προτάσεών τους. Η σειρά με την οποία καλείτε τις ομάδες δεν έχει ιδιαίτερη σημασία, αλλά το να καλέσετε πρώτα τον πρωταγωνιστή (δηλαδή τους ιδιοκτήτες της επιχείρησης) θα βοηθήσει στην καλύτερη ροή του σεναρίου. Έχετε επίσης το καθήκον να χρησιμοποιήσετε ένα χρονόμετρο που θα μπορούν να βλέπουν όλοι οι συμμετέχοντες, ώστε να φαίνεται ότι θα διακόπτονται αν ξεπεράσουν τον χρόνο. Επιπλέον, θα πρέπει να επιτρέψετε στους συμμετέχοντες μόνο μια ελάχιστη πρόσθετη συζήτηση σχετικά με τη δυσκολία της περίπτωσης. Επίσης, πρέπει να είστε διαθέσιμοι για να δώσετε περαιτέρω εξηγήσεις σχετικά με τα θέματα που συζητούνται. Για να πετύχετε όλα τα παραπάνω, θα πρέπει να ενεργήσετε ως συντονιστής, οπότε θα πρέπει να είστε καλά εξοικειωμένοι με κάθε σενάριο, τη ροή της υπόθεσής του, τους ρόλους, τους χαρακτήρες, τις προσωπικότητες που συμμετέχουν σε κάθε μία από τις ομάδες, τα συγκεκριμένα μέρη της προσομοίωσης και βεβαίως το ακριβές χρονοδιάγραμμα, ώστε να μην παρεκκλίνετε από αυτό.

Εκτός από τους συμμετέχοντες, μπορεί να υπάρχει και ένας επαγγελματίας τεχνικός για να διασφαλίσει την ομαλή διεξαγωγή της εκπαιδευτικής διαδικασίας. Ο τεχνικός μπορεί να σας υποστηρίξει εάν δεν είστε καλά εξοικειωμένοι με την οργάνωση και την προετοιμασία όλων των απαραίτητων ρυθμίσεων για την ηλεκτρονική πλατφόρμα που θα φιλοξενήσει την προσομοίωση. Ο τεχνικός μπορεί επίσης να είναι διαθέσιμος για την παροχή σχετικής υποστήριξης με τον εξοπλισμό όποτε χρειαστεί κατά τη διάρκεια της προσομοίωσης ρόλων.

Εξοπλισμός, εργαλεία, πόροι

Στο παρόν εγχειρίδιο παρέχονται επίσης ορισμένες χρήσιμες πληροφορίες σχετικά με τον εξοπλισμό, τα εργαλεία και τους πόρους που απαιτούνται για την εφαρμογή του παιχνιδιού ρόλων. Σημειώστε επίσης ότι υπάρχουν ορισμένες ειδικές απαιτήσεις που πρέπει να ληφθούν υπόψη, ανάλογα με το αν η εκπαίδευση με προσομοίωση λαμβάνει χώρα σε μια παραδοσιακή τάξη ως δια ζώσης διαδικασία ή μέσω μιας διαδικτυακής πλατφόρμας ως εικονική διαδικασία. Περισσότερες πληροφορίες σχετικά με αυτές τις συμβουλές μπορείτε να βρείτε [εδώ](#).

Αξιολόγηση της εκπαίδευσης προσομοίωσης

Η εκπαίδευση προσομοίωσης θα πρέπει να αξιολογείται μετά την ολοκλήρωση του παιχνιδιού ρόλων. Για το σκοπό αυτό, έχει αναπτυχθεί ένα [ερωτηματολόγιο](#) το οποίο θα πρέπει να δοθεί σε όλους τους συμμετέχοντες. Σημειώστε ότι το ερωτηματολόγιο είναι κοινό για όλα τα σενάρια προσομοίωσης.

Executive Summary in Italian

Dato che il cambiamento climatico è una delle sfide più urgenti che la società globale si trova ad affrontare oggi, è possibile e necessario intraprendere azioni per ridurre i suoi effetti negativi sullo sviluppo economico, sul progresso sociale e sulla sostenibilità ambientale. Le aziende, e in particolare le piccole e medie imprese (PMI), hanno un ruolo cruciale da svolgere in questa sfida al cambiamento climatico, guidando la strada verso un futuro sano e più sostenibile, impegnandosi a ridurre le emissioni di gas serra e la produzione di rifiuti, a utilizzare l'energia in modo efficiente e ad applicare pratiche più verdi, che possono effettivamente far risparmiare denaro e ottenere una crescita economica.

Tuttavia, le aziende, e in particolare le PMI, non hanno le capacità o le competenze per fissare obiettivi adeguati e agire nella giusta direzione per rispondere ai cambiamenti climatici. È necessaria una maggiore formazione perché si convertano alla green economy riducendo le emissioni e la produzione di rifiuti, adottando strategie di RSI e politiche verdi, promuovendo l'innovazione e le applicazioni di tecnologie verdi, o concentrandosi sulla formazione del personale interno per un impiego efficiente delle risorse energetiche. È inoltre necessario che ricevano una guida adeguata che contribuisca a definire obiettivi solidi e credibili in linea con le attuali aspettative in materia di cambiamenti climatici.

In questa direzione, i formatori e gli Istituti di Formazione Professionale possono utilizzare la formazione basata sulla simulazione GoGreen, che può rivelarsi molto efficace per lo sviluppo delle conoscenze, delle abilità e delle competenze necessarie agli imprenditori in relazione all'adozione e all'applicazione di pratiche verdi, nonché per migliorare la loro conoscenza sulla necessità di una transizione verde. L'obiettivo generale del pacchetto formativo IO2 di GoGreen è quello di dotare gli enti di formazione professionale e i formatori di un materiale formativo e di linee guida pronte all'uso, in modo da poter implementare con successo attività formative basate sulla simulazione rivolte a persone provenienti da enti privati e imprenditori che necessitano di conoscenze, abilità e competenze per comprendere meglio gli impatti dei cambiamenti climatici e come applicare misure efficaci per mitigare tali impatti nelle loro aziende.

Obiettivo dell'Handbook

Questo manuale è un manuale per il tutor che racchiude i [contenuti di quattro \(4\) diversi scenari](#) di cambiamento climatico. Presenta tutti i documenti e i materiali necessari per il successo della formazione alla simulazione, come la descrizione degli scenari e gli [allegati](#), nonché gli strumenti per la [valutazione della formazione alla simulazione](#). Per ogni scenario di simulazione presenta:

Descrizione dello scenario:

- Contenuto (obiettivi di apprendimento, durata e numero dei partecipanti)
- Script (il caso, i dettagli di contesto, i ruoli)
- Case Flow
- Programma formativo

Allegati:

Attività di preparazione

- Dispensa per lo studente
- Role cards
- Domande per i ruoli
- Documento di autovalutazione di performance dello studente
- Documento Informativo Esteso
- Valutazione di ciascuno scenario (comune a tutti gli scenari)

Il manuale comprende anche una sezione sulla "[Facilitazione della formazione con simulazione di gioco di ruolo](#)".

Target Group

Il presente manuale è destinato ai formatori e agli erogatori di istruzione e formazione professionale che desiderano incorporare pratiche basate sulla simulazione nel loro insegnamento. Il suo scopo è quello di aiutarli a migliorare i metodi, i contenuti e le tecniche di insegnamento, in modo da fornire ai discenti (soggetti privati e imprenditori) le conoscenze, le abilità e le competenze individuali necessarie per comprendere meglio gli impatti dei cambiamenti climatici e applicare misure efficaci per mitigarli.

Valore aggiunto - Motivazioni

Un elemento cruciale della simulazione di ruolo è l'elaborazione e l'analisi di diversi scenari, che consentono di sviluppare e discutere potenziali strategie d'azione in modo realistico, ma allo stesso tempo in un ambiente educativo sicuro e sorvegliato (Salas, Wildman & Piccolo, 2009). Rappresentano aree problematiche future e situazioni difficili, o carenze attuali all'interno del sistema, alle quali i giocatori (studenti) devono rispondere (Waxman, 2010). Il compito dei partecipanti è quello di articolare idee, informazioni e argomenti in modo coerente con il ruolo assegnato. In questo contesto, il tutor mantiene un forte controllo sul focus del gioco di ruolo, consentendo ai partecipanti di esplorare il ruolo attraverso il loro controllo sull'esatto linguaggio del discorso (Salas et al., 2009; Waxman, 2010). Secondo Alden (2000), il beneficio più prezioso derivante da questa forma di formazione è che offre ai partecipanti la possibilità di riflettere sul proprio apprendimento, garantendo al contempo all'istruttore la sicurezza dal timore che l'attività possa "sfuggire di mano" e allontanarsi dal focus desiderato del gioco di ruolo.

La formazione basata sulla simulazione GoGreen prevede simulazioni di ruolo che trattano gli impatti del cambiamento climatico e le azioni che le aziende possono intraprendere per rispondere a questa sfida. Sia i formatori che i discenti acquisiscono familiarità con l'argomento, al fine di approfondire la questione più ampia del cambiamento climatico e dei suoi impatti, nonché le varie misure di mitigazione adottate dalle aziende, poste al centro del contenuto degli scenari. I quattro (4) scenari sviluppati si riferiscono ad attività di simulazione di ruolo rispettive e distinte, corrispondenti ai moduli e alle aree di competenza identificate nell'ambito del progetto GoGreen. Ognuno dei quattro scenari ha una storia propria e sfide diverse che si concentrano su problemi o casi appropriati alla disciplina e

al livello del corso. Attraverso la formazione basata sulla simulazione, ci si aspetta che tutti i partecipanti (persone provenienti da enti privati e imprenditori) acquisiscano conoscenze, abilità e competenze approfondite relative al tema più ampio del cambiamento climatico e dei suoi impatti. Gli scenari di simulazione mirano a sviluppare anche il pensiero critico, la risoluzione dei problemi, la negoziazione, la collaborazione e le capacità decisionali. I quattro (4) scenari sono presentati nel grafico seguente.

Scenari di GoGreen

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Scenario 1: Business as usual (nessun cambiamento nella politica aziendale)

Durata: 2-3 ore

- Elevate emissioni di gas serra (GHG) che influiscono sul clima
- Rischio di sanzioni e multe
- Opportunità mancate di riduzione dei costi
- Cattiva immagine di marketing - Assenza di responsabilità sociale d'impresa (CSR)

Scenario 2: L'azienda decide di investire nella gestione dei gas serra - Risparmio energetico

Durata: 2-3 ore

- Misurare e ridurre le emissioni di gas serra
- Ridurre i costi attraverso politiche di risparmio energetico/applicazioni tecnologiche
- Aumentare l'immagine verde dell'azienda
- Evitare multe e sanzioni
- Migliorare il vantaggio competitivo
- Fornire informazioni agli stakeholder

Scenario 3: L'azienda decide di investire nel comportamento del personale riguardo alle emissioni di gas serra e ai rifiuti.

Durata: 2-3 ore

- Ridurre i costi attraverso la formazione del personale su come utilizzare in modo efficiente l'energia
- Aumentare la consapevolezza del consumo energetico e della produzione di rifiuti
- Responsabilità sociale d'impresa (CSR)

Scenario 4: Mix di scenari 2 e 3

Durata: 3 ore e 20 minuti

- Misurare e ridurre le emissioni di gas serra - Ridurre i costi attraverso politiche di risparmio energetico - applicazioni tecnologiche
- Ridurre i costi attraverso la formazione del personale su come utilizzare in modo efficiente l'energia.
- Aumentare la consapevolezza del consumo energetico e della produzione di rifiuti.
- Evitare sanzioni pecuniarie
- Aumentare l'immagine verde dell'azienda
- Migliorare il vantaggio competitivo - vantaggio del primo arrivato
- Incoraggiare l'innovazione di nuovi prodotti e servizi ecologici.

La tabella seguente illustra il testo per ciascuno dei quattro (4) scenari sviluppati per GoGreen e riassume le linee guida di base per garantire il corretto svolgimento del processo d'apprendimento.

Scenari	Script
1. Business as Usual (Nessuna modifica alla politica aziendale)	Una società di contabilità di medie dimensioni, che fornisce soluzioni economicamente vantaggiose, godeva fino a poco tempo fa di una buona reputazione per quanto riguarda la qualità dei servizi offerti. Tuttavia, sta diventando un operatore low-tech, che non abbraccia la tecnologia o le pratiche di sostenibilità come i suoi concorrenti. Questo comincia ad avere un impatto sulla fidelizzazione dei clienti e non riesce ad attrarre nuovi clienti commerciali. La sua reputazione è in declino insieme al suo profilo di Responsabilità Sociale d'Impresa. Non ha piani di sostenibilità in atto e non si sta muovendo verso un modello di business verde. Le pratiche commerciali dell'azienda dipendono in larga misura dalla carta, e i dipendenti usano la carta per registrare ogni impegno e transazione con i clienti. I dipendenti dell'azienda sono ottimi archivisti e grandi consumatori di carta e prodotti cartacei. La mancanza di investimenti nelle tecnologie dell'informazione e della comunicazione e nelle strutture per le conferenze elettroniche ha portato a una stima elevata delle emissioni di anidride carbonica.
2. L'azienda decide di investire nella gestione dei gas serra - Risparmio energetico	Una PMI agricola greca si occupa di produzione e commercio di vino e olio d'oliva. A causa di un cambiamento nella legislazione nazionale sul cambiamento climatico, l'azienda vede che le emissioni di gas serra e il consumo di energia sono al limite della legalità. Di conseguenza, c'è un'alta possibilità nel prossimo futuro di ricevere una sanzione pecuniaria. Inoltre, la quantità di rifiuti prodotti dalla sua attività ha causato un deterioramento ambientale nell'ecosistema regionale, che è stato notato da alcuni residenti, partner e autorità locali. L'azienda decide di investire nella gestione dei gas serra e nel risparmio energetico per mitigare gli impatti del cambiamento climatico e migliorare la propria impronta ambientale, correggere i potenziali effetti negativi, salvaguardare la propria reputazione e immagine, mantenere un discreto livello di collaborazione con i propri stakeholder e rimanere sulla rotta della sostenibilità e della crescita.
3. L'azienda decide di investire nel comportamento del personale riguardo alle emissioni di gas serra e ai rifiuti.	Un'azienda pubblicitaria che opera a Cipro decide di modificare le pratiche del suo personale per essere in linea con una missione sostenibile. Desidera investire nella formazione aziendale, concentrandosi sul comportamento del personale. I dipendenti saranno istruiti sulle pratiche di risparmio energetico e di riduzione dei rifiuti che porteranno benefici all'azienda in termini di riduzione dei costi e creeranno una cultura di ottimizzazione e riduzione dei costi per migliorare la strategia generale. Inoltre, l'azienda intende concentrarsi sul miglioramento della propria strategia, reputazione e profilo in materia di RSI, adottando un modo di agire più responsabile. Questo porterà a un miglioramento della sua immagine sul mercato.

4. Combinazione di 2° e 3° scenario
- Un'azienda produttrice di pomodori del settore agricolo in Grecia dispone di attrezzature e macchinari propri per la coltivazione e la raccolta. La proprietà (gestione) dell'azienda è stata recentemente rilevata dalla seconda generazione della famiglia fondatrice e l'attuale dirigenza ha un approccio innovativo e una visione strategica per l'azienda. Consapevoli del cambiamento climatico e dell'attuale quadro di riferimento e dell'impatto ambientale della propria attività (consumo di energia, produzione di rifiuti, fertilizzanti, pesticidi, ecc. Consapevoli del fatto che tutti gli attori aziendali hanno un grande impatto, vogliono investire nella formazione aziendale, concentrandosi sul comportamento del personale per aumentare le pratiche di risparmio energetico e di riduzione dei rifiuti, a vantaggio dell'azienda in termini di riduzione dei costi. I proprietari hanno programmato un incontro con i rappresentanti del personale e hanno invitato un esperto ambientale come professionista esterno per dare consigli e un rappresentante locale per discutere il loro progetto sulla gestione dei gas serra e sul risparmio energetico e la formazione del personale per ridurre i costi operativi, mitigare gli impatti del cambiamento climatico e migliorare l'impronta ambientale dell'azienda. Una condizione da dare per scontata è che il budget aziendale per questo tipo di investimento non è illimitato e che i proprietari optano per la soluzione più conveniente in ogni decisione che devono prendere.

Linee guida per il processo di apprendimento comuni a tutti i quattro (4) scenari simulativi.

- In primo luogo, il facilitatore introduce il caso, quindi descrive i dettagli contestuali chiave dello scenario e fornisce informazioni sui ruoli da svolgere.
- I proprietari dell'azienda sono incoraggiati a iniziare il gioco di ruolo, sostenendo i loro interessi aziendali.
- Il resto dei delegati si impegna gradualmente nel gioco di ruolo con la stessa modalità. Tutti i partecipanti possono fornire consigli al proprio delegato di gruppo sia prima che durante il gioco di ruolo, aggiungendo punti chiave utili alla discussione se e quando necessario.
- A ogni gruppo vengono poste alcune domande, in modo da facilitare la discussione e le negoziazioni che porteranno più rapidamente alle decisioni finali dei partecipanti sullo scenario.

Struttura della formazione con simulazione di gioco di ruolo

Ci sono quattro fasi distinte che un formatore dovrebbe seguire durante l'implementazione di un'attività di simulazione di ruolo; queste fasi sono descritte in dettaglio nel programma della lezione di ogni scenario:

N	Fase	Descrizione
1	Inizio della formazione	<p>Il formatore comunica con tutti i partecipanti distribuendo in anticipo il materiale necessario per lo svolgimento del corso. Si tratta di:</p> <ul style="list-style-type: none"> a) la dispensa per i partecipanti b) le schede informative dettagliate <p>Il materiale può essere distribuito qualche giorno prima della realizzazione del laboratorio di simulazione di ruolo. A seconda del livello di competenza dei partecipanti e delle loro conoscenze pregresse sull'argomento, il formatore può decidere se distribuire in anticipo anche le "Carte dei ruoli" e i "Fogli di domande per i ruoli", in modo da preparare meglio i partecipanti alla formazione sulla simulazione. Tuttavia, ciò non comporta l'assegnazione di ruoli particolari ai partecipanti prima che si svolga il workshop vero e proprio, poiché si tratta di un compito che si svolgerà nella fase successiva.</p>
2	Preparazione e spiegazione dell'argomento da parte del formatore	<p>Questa è la fase iniziale del training di simulazione, in cui il formatore si concentra sul tema, assegna i ruoli, crea le procedure, raccoglie tutto il materiale necessario e inizia a organizzare l'aula. Questa fase richiede una buona preparazione da parte del formatore, che deve prendere in considerazione il maggior numero possibile di aspetti del tema e fornire istruzioni esplicite su ciò che ci si aspetta.</p>
3	Preparazione dei tirocinanti al coinvolgimento nella simulazione di gioco di ruolo	<p>Assegnazione dei ruoli e consegna delle istruzioni ai partecipanti. Spiegazione della suddivisione della simulazione di ruolo in compiti specifici e vincoli di tempo. I partecipanti devono avere il tempo necessario per documentarsi sul proprio ruolo, fare domande e prendere confidenza con lo scenario. Alcuni potrebbero sperimentare questo tipo di apprendimento per la prima volta, quindi è importante fornire suggerimenti e/o esempi. Gli istruttori possono tenere delle lezioni o facilitare le discussioni che offriranno un ulteriore contesto e una guida prima dell'attività principale di simulazione del gioco di ruolo.</p>
4	Attività di simulazione di ruolo	<p>È previsto un certo grado di apprendimento individuale. Tuttavia, i partecipanti devono essere guidati durante l'attività. È importante ricordare loro le regole, in modo che rimangano nei loro ruoli o utilizzino capacità di comunicazione adeguate. Il formatore assume il ruolo di osservatore e interviene solo se e quando necessario.</p>

5	Resoconto riflessione attività	e sulle	Prima di concludere il gioco di ruolo, il formatore deve coordinare il debriefing, che contribuisce ad approfondire le decisioni prese e i comportamenti messi in atto. Sulla base del feedback, i formatori possono elaborare i bisogni di apprendimento, chiarire i malintesi o apportare modifiche per i giochi di ruolo futuri. Il formatore riconosce il coinvolgimento emotivo generale degli allievi, la cui auto-riflessione può essere integrata durante il gioco di ruolo e dopo ogni sessione, in modo che il formatore abbia una migliore comprensione e un quadro più completo di come sta andando l'attività.
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Facilitazione della formazione con simulazione di gioco di ruolo

Suggerimenti per il briefing

Le istruzioni per tutti i partecipanti al gioco di ruolo devono essere inequivocabili e totalmente in linea con gli obiettivi. È necessario utilizzare una chiara introduzione che informi i partecipanti sullo scopo del gioco, sugli obiettivi e sulle motivazioni e definizioni situazionali proprie (e/o del programma). Fornite le informazioni di base sul cambiamento climatico che devono essere riviste per la simulazione, insieme ai temi chiave e ai dettagli contestuali dello scenario. Preparatevi bene prendendo in considerazione il maggior numero possibile di aspetti del tema e concentratevi su ciò che ci si aspetta dai partecipanti. Il docente agisce come facilitatore del gioco di ruolo, introducendo il gioco e il modello di simulazione, prima di aprire ufficialmente l'azione di gioco di ruolo. È necessario dare ai partecipanti un tempo adeguato per leggere il caso di scenario, familiarizzare con i loro ruoli e porre domande. Ulteriori informazioni su questi suggerimenti sono disponibili [qui](#).

Consigli per il gioco di ruolo vero e proprio

Assumete il ruolo di osservatori e intervenite solo se e quando necessario. Pur essendo presenti, non avrete un ruolo attivo nella rappresentazione. Lasciate che la simulazione scorra ad ogni nuovo impegno aggiunto. Investite del tempo per ascoltare i discorsi di proposta di ciascun delegato e per monitorare lo svolgimento della simulazione. Cercate di rimanere in silenzio, riducete al minimo il vostro intervento e lasciate che il gioco di ruolo faccia il suo lavoro. Prevedete tempo e spazio sufficienti per la negoziazione dei delegati (gruppi). Consentite loro di partecipare a più tornate negoziali, in modo da raggiungere gli obiettivi e un accordo o una soluzione di rottura (idealmente per consenso). Il vostro compito è quello di far sì che gli attori imparino attraverso il gioco di ruolo, si sforzino personalmente e si impegnino il più possibile. È importante ricordare loro le regole, in modo che rimangano nei loro ruoli e/o utilizzino abilità comunicative adeguate.

Consigli per il debriefing

Quando le trattative si sono concluse e gli attori hanno preso le decisioni finali, si svolge la discussione di debriefing. È la fase più importante della simulazione e può richiedere più tempo della recita vera e propria (anche il doppio). Per risparmiare tempo durante il debriefing, si possono porre domande valide per tutti e attendere che vengano sollevate mani, inviati messaggi nella chat o espressi i voti da parte di tutti. Un'altra idea è quella di invitare i partecipanti a prendersi un minuto di silenzio per riflettere sulle opportunità future.

Anche l'attività di valutazione fa parte del debriefing. Comporta 2 questionari separati che devono essere compilati da tutti i partecipanti (una scheda di valutazione delle prestazioni individuali e una scheda di valutazione della formazione alla simulazione). Spiegate ai partecipanti perché questa attività è importante e chiarite loro che i questionari sono anonimi e devono essere compilati individualmente, senza l'intervento di terzi. Non ci sono risposte giuste o sbagliate e i partecipanti devono rispondere con la massima franchezza possibile in base alla loro opinione personale.

Impostazioni del contesto di apprendimento

Giochi di ruolo in classe

Per un evento di persona, si potrebbe allestire un'aula tranquilla. Sebbene anche uno spazio aperto sia un'opzione, comporta alcuni rischi in termini di distrazioni che possono comparire (condizioni meteorologiche, rumore ambientale, difficoltà di preparare e svolgere il gioco di ruolo di simulazione senza le attrezzature adeguate/speciali necessarie, ecc.)

Gioco di ruolo online

Per un evento online, potete scegliere una piattaforma online a cui avete accesso e con cui avete familiarità. Tuttavia, quest'ultima è necessaria anche per gli attori, poiché costituisce un fattore determinante per il successo del gioco di ruolo. Inoltre, bisogna considerare che un evento online comporta qualche piccolo rischio in termini di distrazioni che possono comparire a causa di potenziali disconnessioni della rete o di dispositivi incompatibili utilizzati dai partecipanti, come cuffie e/o qualsiasi altro hardware che potrebbe far perdere tempo e costringere l'addestramento alla simulazione ad accumulare ritardi. È importante che la piattaforma online scelta per la simulazione offra la funzione "breakout room", in modo che i delegati possano decidere privatamente all'interno del proprio gruppo le argomentazioni e le strategie da seguire durante le negoziazioni.

Personale coinvolto

In qualità di formatore, sarete presenti per coordinare la simulazione. Tra i vostri compiti c'è quello di ascoltare attentamente tutti i discorsi degli attori, dimostrando il tipo di attenzione che volete che gli altri impieghino. In mezzo a tutta la retorica, prendete nota delle azioni specifiche che vengono proposte e chiarite ogni volta che è necessario. Tra i vostri compiti c'è anche quello di chiamare i

delegati del gruppo e di assegnare un tempo adeguato per la breve presentazione delle loro proposte. L'ordine dei gruppi non ha molta importanza, ma chiamare per primo il leader (cioè i proprietari dell'azienda) faciliterà la simulazione. Dovete anche prevedere un timer che tutti gli attori potranno guardare, in modo da mostrare che saranno tagliati fuori se sfiorano il tempo a disposizione. Inoltre, dovrete concedere agli attori solo una minima possibilità di replica in caso si creino delle criticità durante la simulazione. Inoltre, dovrete essere disponibili a fornire ulteriori spiegazioni sulle questioni discusse. Per realizzare tutto ciò, dovrete agire come facilitatori, quindi dovrete conoscere a fondo ogni scenario, il suo svolgimento, i ruoli e i personaggi, le persone che partecipano a ciascuno dei gruppi, le parti specifiche della simulazione e certamente l'orario esatto, in modo da non discostarvene.

Oltre ai partecipanti, potrebbe essere disponibile anche un esperto informatico per garantire il corretto svolgimento della simulazione online. L'esperto tecnico può aiutarvi se non sapete bene come organizzare e preparare tutte le regolazioni necessarie per la piattaforma online che ospita la simulazione. L'esperto può anche essere disponibile a fornire supporto con le attrezzature tecniche quando necessario durante il gioco di ruolo.

Attrezzature, strumenti, risorse

Il manuale attuale contiene anche alcune informazioni utili sulle attrezzature, gli strumenti e le risorse necessarie per la realizzazione del gioco di ruolo. Si noti anche che ci sono alcuni requisiti speciali da considerare, a seconda che la formazione alla simulazione si svolga in una classe tradizionale, come evento di persona, o attraverso una piattaforma online, come evento virtuale. Ulteriori informazioni su questi suggerimenti sono disponibili [qui](#)

Valutazione del training di simulazione

Il programma di simulazione deve essere valutato dopo il completamento del gioco di ruolo. A questo scopo, è stato sviluppato un [questionario](#) che deve essere distribuito a tutti i partecipanti. Si noti che il questionario è comune a tutti gli scenari di simulazione.

Executive Summary in Spanish

Dado que el cambio climático es uno de los retos más importantes y preocupantes a los que se enfrenta la sociedad mundial en la actualidad, se pueden y deben tomar medidas para reducir sus efectos negativos sobre el desarrollo económico, el progreso social y la sostenibilidad medioambiental. Las empresas, y especialmente las pequeñas y medianas empresas (PYMES), tienen un papel fundamental que desempeñar ante este reto del cambio climático, liderando el camino hacia un futuro saludable y más sostenible esforzándose en reducir sus emisiones de Gases de Efecto Invernadero (GEI) y la producción de residuos, utilizando la energía de forma eficiente y aplicando prácticas más ecológicas, que realmente puedan ahorrar dinero y lograr el crecimiento económico.

Sin embargo, las empresas, y en particular las PYME, carecen de las habilidades o competencias necesarias para establecer objetivos adecuados y actuar en la dirección correcta para responder al cambio climático. Se necesita formación y capacitación para que se vuelvan más ecológicas, reduciendo las emisiones y la producción de residuos, adoptando estrategias de RSE y políticas ecológicas, fomentando la innovación y las aplicaciones de tecnologías verdes, o centrándose en la formación de su personal para que utilice la energía de forma eficiente. Las empresas también necesitan recibir una orientación adecuada que contribuya a establecer objetivos sólidos y creíbles en consonancia con las expectativas actuales sobre el cambio climático.

En este sentido, los formadores y los proveedores de Formación Profesional (FP) pueden emplear la formación basada en la simulación GoGreen, que puede resultar muy eficaz para el desarrollo de los conocimientos, las habilidades y las competencias necesarias de los empresarios en relación con la adopción y la aplicación de prácticas ecológicas, así como para fomentar sus actitudes hacia la transición ecológica. El objetivo general del paquete de formación IO2 de GoGreen es proporcionar a los proveedores de FP y a los formadores un material de formación y una guía de implementación listas para ser utilizadas, con el fin de poder llevar a cabo con éxito actividades de formación basadas en la simulación, dirigidas a personas de entidades privadas y a empresarios, que requieran conocimientos, habilidades y competencias para comprender mejor los impactos del cambio climático y cómo aplicar medidas eficaces que mitiguen dichos impactos en sus negocios.

Alcance del Manual

Este manual constituye una guía del profesor que incluye contenido de [cuatro \(4\) escenarios](#) diferentes de cambio climático. Presenta todos los documentos y materiales necesarios para la implementación con éxito de la formación basada en simulación, la descripción de los escenarios y los [anexos](#), así como las herramientas para la [evaluación de la formación basada en simulación](#). Para cada escenario de simulación se presenta:

La descripción del escenario:

- Contenido (Objetivos de aprendizaje, duración, participantes)
- Guión (caso, detalles contextuales, roles)
- Flujo del caso
- Plan de formación

Anexos

- Guía rápida del profesor
- Actividad de calentamiento
- Tarjetas de rol
- Hojas de preguntas para cada rol
- Hoja de evaluación individual
- Hoja de información adicional
- Evaluación de la formación (común para todos los escenarios)

El manual incluye también una sección sobre la "[Facilitación de la formación basada en simulación de juegos de rol](#)".

Grupo objetivo

El presente manual está dirigido a formadores y proveedores de FP que deseen integrar prácticas basadas en la simulación en su enseñanza. El objetivo es ayudarles a complementar sus métodos, contenidos y técnicas de enseñanza, a fin de proporcionar a los alumnos (entidades privadas y emprendedores) los conocimientos, habilidades y competencias individuales necesarios para comprender mejor los impactos del cambio climático y aplicar medidas efectivas para mitigar dichos impactos.

Valor Añadido – Motivación

Un elemento crucial de la simulación de los juegos de rol es la elaboración y análisis de diferentes escenarios, que permiten desarrollar y discutir estrategias de acción potenciales de manera realista, pero dentro de un entorno educativo seguro y supervisado al mismo tiempo (Salas, Wildman&Piccolo, 2009). Representan áreas problemáticas futuras y situaciones difíciles, o deficiencias actuales dentro del sistema, a las que se espera que los jugadores (alumnos) respondan (Waxman, 2010). La tarea para los participantes es articular ideas, información y argumentos de una manera que sea consistente con su papel dado. Dentro de este marco, el profesor mantiene un cierto control sobre el enfoque del juego de roles, al tiempo que permite a los participantes explorar su papel a través de su control sobre la conversación (Salas et al., 2009; Waxman, 2010). Según Alden (2000), el beneficio máspreciado que se deriva de esta forma de formación es que da margen para que los participantes reflexionen sobre su aprendizaje, al tiempo que le da al profesor seguridad ante la posibilidad de que la actividad "se salga de control" y se aleje del enfoque deseado del juego de roles.

La formación basada en la simulación de GoGreen implica simulaciones de juego de rol que se ocupan de los impactos del cambio climático y las acciones que las empresas pueden tomar para responder a este desafío. Tanto los formadores como los estudiantes se familiarizan con el tema, con el fin de exponer el tema más amplio del Cambio Climático y sus impactos, así como las diversas medidas de mitigación de las empresas colocadas en el centro del contenido de los escenarios. Los cuatro (4) escenarios desarrollados se refieren a actividades de simulación de juego de rol separadas, correspondientes a los módulos y competencias identificados dentro del proyecto. Cada uno de los cuatro escenarios tiene su propia historia y diferentes desafíos que se centran en problemas o casos apropiados para la disciplina y el nivel del curso. A través de la formación basada en simulación, se espera que todos los participantes (personas de entidades privadas y empresarios) adquieran conocimientos, habilidades y competencias profundas en relación con el tema más amplio del cambio

climático y sus impactos. Los escenarios de simulación pretenden desarrollar también sus habilidades de pensamiento crítico, resolución de problemas, negociación, colaboración y toma de decisiones. Los cuatro (4) escenarios se presentan a continuación.

Escenarios de GoGreen

Escenario 1: Negocio como de costumbre (sin cambios en la estrategia) Duración: 2-3 horas	<ul style="list-style-type: none"> • Elevadas emisiones de GEI que afectan al clima • Riesgo de penalización/multas • Pérdida de oportunidades de reducción de costes • Imagen comercial pobre, sin RSC
Escenario 2: La empresa decide invertir en gestión de GEI y ahorro de energía Duración: 2-3 horas	<ul style="list-style-type: none"> • Medir y reducir las emisiones de GEI • Reducir los costes mediante políticas de ahorro energético/aplicaciones tecnológicas • Aumentar la imagen verde de la empresa • Evitar sanciones-multas • Mejorar la ventaja competitiva • Proporcionar información a todas las partes interesadas
Escenario 3: La empresa decide invertir en el comportamiento del personal sobre las emisiones y los residuos de GEI Duración: 2-3 horas	<ul style="list-style-type: none"> • Reducir los costes formando al personal en el uso eficiente de la energía • Concienciar sobre el consumo de energía y la producción de residuos • Responsabilidad social corporativa (RSC)
Escenario 4: Mezcla de 2º y 3º Escenario Duración: 3 horas y 20 minutos	<ul style="list-style-type: none"> • Medir y reducir las emisiones de gases de efecto invernadero - Reducir los costes mediante políticas de ahorro energético - Aplicaciones tecnológicas • Reducir los costes mediante la formación del personal en el uso eficiente de la energía y concienciar sobre el consumo de energía y la producción de residuos. • Evitar sanciones-multas • Aumentar la imagen ecológica de la empresa • Mejorar la ventaja competitiva • Fomentar la innovación de nuevos productos y servicios ecológicos

En la tabla siguiente se describe el guión para cada uno de los cuatro (4) escenarios desarrollados para GoGreen y se resumen las directrices básicas sobre cómo garantizar el flujo del caso adecuado.

Escenario	Guión
1. Negocio como de costumbre (sin cambios en la estrategia)	Una empresa de contabilidad de tamaño mediano, que proporciona soluciones rentables, tenía una buena reputación hasta hace poco en cuanto a la calidad de los servicios prestados. Sin embargo, se está convirtiendo en un operador de baja tecnología, que no adopta la tecnología o las prácticas de sostenibilidad como sus competidores. Esto comienza a impactar en la retención de clientes y no está atrayendo nuevos clientes. Su reputación está disminuyendo junto con su perfil de RSC (Responsabilidad Social Corporativa). No tiene planes de sostenibilidad y no se está moviendo hacia un modelo de negocio verde. Su práctica comercial depende en gran medida del papel, los empleados usan papel para registrar cada compromiso y transacción del cliente. Las personas en la empresa son excelentes guardianes de registros y grandes consumidores de papel. La falta de inversión de la compañía en instalaciones de TIC y medios electrónicos ha traído una alta huella de carbono considerable.
2. La empresa decide invertir en gestión de GEI y ahorro de energía	Una PYME agrícola en Grecia se ha centrado en la producción y el comercio de vino y aceite de oliva. Debido a un cambio en la legislación empresarial nacional sobre el cambio climático, la compañía ve que las emisiones de GEI y el consumo de energía están en el límite de la legalidad. Por lo tanto, existe una alta posibilidad en un futuro cercano de recibir una multa por eso. Además, la cantidad de residuos producidos por su actividad ha provocado un deterioro ambiental en el ecosistema regional, que ha sido notado por algunos residentes cercanos, socios y autoridades locales. La compañía decide invertir en la gestión de GEI y el ahorro de energía con el fin de mitigar los impactos del cambio climático y mejorar su huella ambiental, rectificar los posibles efectos negativos, proteger su reputación e imagen, mantener un nivel decente de colaboración con sus partes interesadas y mantenerse en el camino hacia la sostenibilidad y el crecimiento.
3. La empresa decide invertir en el comportamiento del personal sobre las emisiones y los residuos de GEI	Una empresa de publicidad que opera en Chipre decide alterar las prácticas de su personal para estar en línea con una misión sostenible. Desea invertir en formación corporativa y centrarse en el comportamiento de su personal. Los empleados serán capacitados en prácticas de ahorro de energía y reducción de residuos que beneficiarán a la empresa en términos de reducción de costes y crearán una cultura de optimización de costos y reducciones de costes para mejorar la estrategia general. Asimismo, la compañía pretende centrarse en mejorar su estrategia de RSC, reputación y perfil, adoptando una forma de actuación más responsable. Esto llevará a mejorar su respectiva imagen en el mercado.

<p>4. Mezcla de 2º y 3º Escenario</p>	<p>Un productor de tomate en el sector agrícola en Grecia tiene su propio equipo y maquinaria de cultivo y cosecha. La propiedad de la empresa (gestión) ha sido recientemente asumida por la 2ª generación de la familia fundadora y la dirección actual tiene un pensamiento innovador y una visión estratégica para el negocio. Siendo conscientes del cambio climático y del marco real y el impacto ambiental de su negocio (consumo de energía, producción de residuos, fertilizantes, pesticidas, etc.), los propietarios desean implementar un proyecto para reducir la huella ambiental de su negocio. Siendo conscientes de que todos los actores empresariales tienen un gran impacto, quieren invertir en formación corporativa con enfoque en el comportamiento del personal para aumentar las prácticas de ahorro de energía y reducción de residuos que benefician a la empresa en términos de reducción de costes. Los propietarios han planificado una reunión con el representante del personal e invitado a un experto ambiental como profesional externo para dar asesoramiento, y a un representante local para que analice su proyecto sobre la gestión de GEI y el ahorro de energía y la capacitación del personal para reducir los costos operativos, mitigar los impactos del cambio climático y mejorar la huella ambiental del negocio. Una condición que debe darse por sentada se refiere a que el presupuesto de la empresa para tal inversión no está exento de limitaciones, y los propietarios optan por la solución más rentable en cada decisión que tienen que tomar.</p>
<p>Directrices para el flujo del caso, comunes para los cuatro (4) escenarios.</p>	<ul style="list-style-type: none"> - Primero, el facilitador presenta el caso, luego describe los detalles contextuales clave del escenario y proporciona información de los roles a desempeñar. - Se anima a los dueños de negocios a iniciar el juego de roles, apoyando sus intereses comerciales. - El resto de los delegados se involucran gradualmente en el juego de rol de la misma manera. Todos los participantes pueden aconsejar a su delegado de grupo antes y durante el juego de rol, agregando puntos clave útiles en la discusión y cuando sea necesario. - Se hacen algunas preguntas a cada grupo, a fin de facilitar la discusión y las negociaciones que conducirán más rápido a las decisiones finales de los participantes sobre el escenario.

Estructura de la formación basada en simulación de juego de rol

Hay cuatro etapas distintas que un formador debe seguir al implementar una actividad de simulación de juego de rol, estos pasos se describen en detalle en el plan de formación de cada escenario:

N	Etapas	Descripción
1)	Inicio de la formación	<p>El profesor se comunica con todos los participantes distribuyendo de antemano el material necesario para que estudien. Esto se refiere a:</p> <ul style="list-style-type: none"> a) la guía del alumno y b) las fichas informativas ampliadas <p>El material se puede distribuir unos días antes de implementar el taller de simulación de rol. Dependiendo del nivel de habilidades de los participantes y de sus conocimientos previos sobre el tema, el formador puede decidir distribuir también por adelantado las "Tarjetas de rol" y las "Hojas de preguntas para roles", con el fin de preparar mejor a los participantes sobre la formación basada en simulación, sin asignar ningún papel particular a los participantes antes de que se lleve a cabo el taller real, ya que es una tarea que ocurre en la siguiente etapa.</p>
2)	Preparación y explicación del tema por parte del profesor	<p>Esta es la etapa inicial de la formación, donde el profesor se enfoca en el tema, asigna roles, crea procedimientos, reúne todo el material necesario y comienza a organizar el aula. Este paso requiere una buena preparación por parte del profesor, quien debe tener en cuenta tantos aspectos del tema como sea posible y proporcionar una instrucción explícita de lo que se espera.</p>
3)	Preparación de los alumnos para participar en la simulación de juego de rol	<p>Asignación de roles e instrucciones proporcionadas a los participantes. Explicación del desglose de la simulación de juego de roles en tareas específicas y limitaciones de tiempo. Se dará tiempo adecuado a los alumnos para que investiguen sus roles, hagan preguntas y se sientan cómodos con el escenario. Algunos pueden experimentar este tipo de aprendizaje por primera vez, por lo tanto, es importante proporcionar consejos y / o ejemplos. Los instructores pueden dar consejos o facilitar discusiones que ofrecerán más contexto y orientación antes de la actividad principal de simulación de juego de rol.</p>
4)	Actividad real de simulación de juego de rol	<p>Se proporciona y se espera un grado de aprendizaje independiente. Sin embargo, los aprendices aún necesitan ser guiados durante la actividad. Es importante recordarles las reglas, para que permanezcan en sus roles o usen las habilidades de comunicación apropiadas. El formador se ocupa del papel de observador e interviene sólo cuando es necesario.</p>

5)	Informe y reflexión	Antes de cerrar el juego de rol, el profesor debe coordinar el informe final, lo que contribuye a obtener una mayor comprensión de las decisiones tomadas y los comportamientos mostrados. Sobre la base de la retroalimentación, los formadores pueden elaborar tareas de aprendizaje, aclarar malentendidos o hacer ajustes para futuros juegos de rol. El formador reconoce la implicación emocional global de los alumnos, cuya autorreflexión puede integrarse a lo largo del juego de roles y después de cada sesión, de modo que el formador tenga una mejor comprensión y una imagen más completa de cómo va la actividad.
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Facilitación de la formación basada en simulación de juegos de rol

Consejos para la sesión informativa

La información para todos los participantes en el juego de rol debe ser inequívoca y totalmente en línea con los objetivos. Debe usar una introducción clara que informe a los participantes sobre el propósito del juego, los objetivos y sus propios motivos (y / o basados en el programa) y las definiciones situacionales. Proporcionar la información de conocimiento de fondo sobre el cambio climático que debe revisarse para la simulación, junto con temas clave y detalles contextuales del escenario. Esté bien preparado teniendo en cuenta tantos aspectos del tema como sea posible y concéntrese en lo que se espera de los alumnos. Actúe como facilitador del juego de rol, introduciendo el juego y el modelo de simulación, antes de abrir oficialmente la acción de rol. Se debe dar tiempo suficiente a los alumnos para leer el caso del escenario, familiarizarse con sus roles y hacer preguntas. Puede encontrar más información sobre estos consejos [aquí](#).

Consejos para el juego de roles real

Asuma el papel de observador e intervenga sólo cuando sea necesario. A pesar de estar presente, no tenga un papel activo. Deje que la simulación fluya con cada nueva idea. Invierta tiempo para escuchar los discursos y propuestas de cada delegado y supervise la ejecución del escenario de simulación. Trate de permanecer en silencio y deje que el juego de rol haga su trabajo. Establezca suficiente tiempo y espacio para que los delegados (grupos) negocien. Permítales participar en múltiples rondas de negociaciones, a fin de alcanzar objetivos y alcanzar un acuerdo o solución innovadora (idealmente por consenso). Su tarea es facilitar para que los alumnos aprendan a través del juego de rol, mejoren capacidades personales y se involucren tanto como sea posible. Es importante recordarles las reglas, para que permanezcan en sus roles y / o usen las habilidades de comunicación apropiadas.

Consejos para el Resumen (Debriefing)

Cuando las negociaciones han concluido y las decisiones finales han sido tomadas por los actores, se lleva a cabo la discusión informativa. Es la etapa más importante de la simulación y puede tomar más tiempo que la simulación real (incluso el doble de eso). Para ahorrar tiempo durante el informe, puede plantear preguntas que se apliquen a todos, o enviar mensajes de texto. Otra idea es invitar a los alumnos a tomar 1 minuto de silencio para reflexionar sobre las posibilidades futuras.

La actividad de evaluación también forma parte del resumen. Implica 2 cuestionarios separados que deben ser completados por todos los participantes (una hoja de evaluación de desempeño individual

y una hoja de evaluación de la formación basada en simulación). Explique a los participantes por qué esta actividad es importante y deje en claro que los cuestionarios son anónimos y deben completarse individualmente, sin ninguna intervención de terceros. No hay respuestas correctas o incorrectas, y deben responder con la mayor franqueza posible en función de su opinión individual.

Configuración del entorno de aprendizaje

Juego de rol en el aula

Para un evento en persona, se podría configurar una sala de conferencias tranquila. Si bien el espacio abierto también es una opción, conlleva cierto riesgo en términos de distracciones que pueden aparecer (condiciones climáticas, ruido ambiental, dificultad para preparar y ejecutar el juego de rol de simulación sin el equipo adecuado / especial requerido, etc.).

Juego de rol en línea

Para un evento en línea, puede elegir una plataforma en línea con la que esté familiarizado. Sin embargo, esto último también es necesario para los actores, ya que constituye un factor determinante para el éxito del juego de rol. Además, debe tener en cuenta que un evento en línea conlleva algún riesgo menor en términos de distracciones que pueden aparecer debido a posibles desconexiones de la red o dispositivos incompatibles utilizados por los participantes, como auriculares y / o cualquier otro hardware que pueda consumir tiempo y obligar a la simulación a retrasarse. Es importante que la plataforma en línea seleccionada en la simulación ofrezca la función de "salas paralelas", para que los delegados puedan decidir en privado dentro de sus propios grupos la argumentación y la estrategia a seguir durante las negociaciones.

Personal involucrado

Como profesor, estará presente para coordinar la simulación. Entre sus tareas está escuchar atentamente todos los discursos de los actores, demostrando el tipo de enfoque que quiere que otros empleen. En medio de toda la retórica, observe las acciones específicas que se proponen y aclare cuando sea necesario. Dentro de sus tareas también está convocar a los delegados del grupo y asignar el tiempo adecuado para la breve presentación de sus propuestas. El orden de los equipos no importa, pero convocar primero al personaje principal (es decir, a los dueños de negocios) ayudará a que el caso fluya mejor. También tiene la tarea de proyectar un temporizador que todos los actores podrán ver, para controlar el flujo del caso. Además, debe permitir que los actores solo utilicen una retórica adicional mínima y debe estar disponible para proporcionar explicaciones adicionales sobre los temas discutidos en caso requerido. Para lograr todo lo anterior, debe actuar como un facilitador, por lo que debe estar profundamente familiarizado con cada escenario, su flujo del caso, los roles y personajes, las personalidades que participan en cada uno de los grupos, las partes específicas de la simulación y el control horario.

Además de los participantes, un experto técnico también podría estar disponible para garantizar la realización sin problemas de la simulación. El experto técnico puede ayudarle si no está bien familiarizado con la organización y preparación de todos los ajustes necesarios para la plataforma en línea para la simulación. El experto también puede estar disponible para proporcionar el apoyo pertinente con el equipo técnico siempre que sea necesario durante el juego de rol.

Equipos, Herramientas, Recursos

En el manual actual, también se proporciona información útil sobre el equipo, las herramientas y los recursos necesarios para la implementación del juego de rol. Tenga en cuenta también que hay algunos requisitos especiales a considerar, dependiendo de si la formación se está llevando a cabo en una clase tradicional, o a través de una plataforma en línea como un evento virtual. Puede encontrar más información sobre estos consejos [aquí](#).

Evaluación de la formación basada en simulación

La formación debe evaluarse después de la finalización del juego de rol. Con este fin se ha elaborado un [cuestionario](#) que debe distribuirse a todos los participantes. Tenga en cuenta que el cuestionario es común para todos los escenarios de simulación.

Executive Summary in Czech

Vzhledem k tomu, že změna klimatu je jednou z nejnaléhavějších výzev, kterým dnes globální společnost čelí, mohou a musí být přijata opatření ke snížení jejich negativních dopadů na hospodářský rozvoj, sociální pokrok a udržitelnost životního prostředí. Společnosti, a zejména malé a střední podniky, hrají v této výzvě v oblasti změny klimatu zásadní úlohu. Vedou cestu ke zdravé a udržitelnější budoucnosti tím, že vynaloží velké úsilí na snížení emisí skleníkových plynů a produkce odpadů, účinné využívání energie a uplatňování ekologičtějších postupů, které mohou skutečně ušetřit peníze a dosáhnout hospodářského růstu.

Společnosti, a zejména malé a střední podniky, však postrádají dovednosti nebo kompetence k tomu, aby si stanovily vhodné cíle a jednaly správným směrem v reakci na změnu klimatu. Potřebují více odborné přípravy, aby se staly ekologickými prostřednictvím snižování emisí a produkce odpadů, přijímáním strategií sociální odpovědnosti podniků a ekologických politik, podporou inovací a aplikací zelených technologií nebo zaměřením se na školení svých zaměstnanců, aby efektivně využívali energie. Musí rovněž obdržet řádné pokyny, které přispívají ke stanovení spolehlivých a důvěryhodných cílů v souladu se současnými očekáváními v oblasti změny klimatu.

V tomto směru mohou školitelé a poskytovatelé odborného vzdělávání a přípravy využít školení založené na simulaci GoGreen, které se může ukázat jako velmi účinné pro rozvoj nezbytných znalostí, dovedností a kompetencí podnikatelů souvisejících s přijetím a uplatňováním ekologických postupů, jakož i pro zlepšení kultivace jejich postojů k nutnosti ekologické transformace. Celkovým cílem školicího balíčku IO2 společnosti GoGreen je vybavit poskytovatele odborného vzdělávání a přípravy a školitele výukovým imateriály a pokyny připravenými k okamžitému použití, aby mohli úspěšně realizovat simulační vzdělávací činnosti zaměřené na osoby ze soukromých subjektů a podnikatele, kteří potřebují znalosti, dovednosti a kompetence, aby lépe porozuměli dopadům svého podnikání na změny klimatu a uplatňovali účinná opatření, která tyto dopady zmírňují.

Oblast využití příručky

Tato příručka představuje manuál pro učitele či školitele, který zahrnuje obsah [čtyř různých scénářů změny klimatu](#). Představuje všechny potřebné dokumenty a materiály pro úspěšnou realizaci simulačního výcviku, jako je popis scénářů a [přílohy](#), jakož i nástroje pro [hodnocení simulačního výcviku](#). Scénář ke každé simulaci zahrnuje:

Popis scénáře

- Obsah (výukové výstupy, doba trvání, počet účastníků)
- Scénář (případ, kontextové podrobnosti, role)
- Průběh případu
- Plán výuky

Přílohy

- Příručka pro školené osoby
- Zahřívací aktivita
- Karty rolí
- Listy s otázkami k rolím
- List pro hodnocení individuálního výkonu
- Rozšířený informační list
- Hodnocení simulačního výcviku (společné pro všechny scénáře)

Příručka obsahuje také oddíl o „[Usnadnění simulačního výcviku hraní rolí](#)”,

Cílová skupina

Tato příručka je určena školitelům a poskytovatelům odborného vzdělávání a přípravy, kteří chtějí do své výuky začlenit simulační postupy. Jejím cílem je pomoci jim pokročit ve vlastních vyučovacích metodách, obsahu a technikách tak, aby studenti (soukromé subjekty a podnikatelé) získali potřebné znalosti, dovednosti a individuální kompetence, aby lépe porozuměli dopadům změny klimatu a uplatňovali účinná opatření ke zmírnění těchto dopadů.

Přidaná hodnota – motivace

Klíčovým prvkem simulace hraní rolí je zpracování a analýza různých scénářů, které umožňují rozvíjet a diskutovat potenciální akční strategie realistickým způsobem, ale zároveň v bezpečném a kontrolovaném vzdělávacím prostředí (Salas, Wildman & Piccolo, 2009). Představují budoucí problematické oblasti a obtížné situace nebo současné nedostatky v systému, na které mají hráči (studenti) reagovat (Waxman, 2010). Úkolem účastníků je formulovat myšlenky, informace a argumenty způsobem, který je v souladu s danou rolí. V takovém rámci si školitel udržuje silnou kontrolu nad zaměřením hraní rolí a zároveň umožňuje účastníkům, aby prozkoumali svou roli za pomoci vlastního vyjadřování (Salas et al., 2009; Waxman, 2010). Podle Aldena (2000) je nejcennějším přínosem plynoucím z této formy výcviku to, že dává účastníkům prostor k zamyšlení nad svým učením a zároveň dává instruktorovi jistotu před strachem, že se aktivita „vymkne z rukou“ a odchýlí se od požadovaného zaměření hraní rolí.

Školení založené na simulaci GoGreen zahrnuje simulace hraní rolí, které se zabývají dopady změn klimatu a opatřeními, která mohou společnosti podniknout, aby reagovaly na tuto výzvu. Školitelé i studenti se s tímto tématem seznámí, aby vysvětlili širší problematiku změny klimatu a jejích dopadů, jakož i různá zmírňující opatření společností. Tato opatření jsou jádrem scénářů. [Čtyři \(4\) vypracované scénáře](#) odkazují na příslušné a samostatné simulační činnosti hraní rolí, které odpovídají modulům a oblastem kompetencí identifikovaným v rámci projektu GoGreen. Každý ze čtyř scénářů má svůj vlastní příběh a různé výzvy, které se zaměřují na problémy nebo případy vhodné pro obor a úroveň kurzu. Prostřednictvím školení založeného na simulaci se očekává, že všichni účastníci (lidé ze soukromých subjektů a podnikatelé) získají hluboké znalosti, dovednosti a kompetence týkající se širší problematiky změny klimatu a jejích dopadů. Simulační scénáře mají za cíl rozvíjet také kritické myšlení, řešení problémů, vyjednávání, spolupráci a rozhodovací schopnosti. Čtyři (4) scénáře jsou uvedeny v následujícím grafu.

Scénáře GoGreen

Scénář 1: Firma nedělá žádnou změnu obchodní politiky

Čas: 2-3 hodiny

Vysoké emise skleníkových plynů (GHG), které ovlivňují klima
Pokuty a sankce
Promarněné příležitosti ke snížení nákladů
Špatná marketingová image – žádná společenská odpovědnost firem (CSR)

Scénář 2: Firma se rozhodla investovat do managementu GHG – Úspory energie

Čas: 2-3 hodiny

Měření a snižování emisí skleníkových plynů (GHG)
Snížit náklady úsporou energetických politik / technologických aplikací
Zvýšit firemní zelenou image a CSR
Vyhnout se pokutám
Zlepšit konkurenční výhodu
Poskytování informací zúčastněným stranám

Scénář 3: Firma se rozhodla investovat do chování zaměstnanců v souvislosti s emisemi skleníkových plynů a odpady

Čas: 2-3 hodiny

Snížení nákladů díky proškolení zaměstnanců o tom, jak efektivně využívat energii
Zvyšovat povědomí o spotřebě energie a produkci odpadů
Společenská odpovědnost firem (CSR)

Scénář 4: Firma se rozhodla pro kombinaci scénáře 2 a 3

Čas: 3 hodiny a 20 minut

Měření a snižování emisí GHG – Snižování nákladů - technologické aplikace
Snížení nákladů školením zaměstnanců o tom, jak efektivně využívat energii
Zvyšovat povědomí o spotřebě energie a produkci odpadů
Vyhnout se pokutám
Zlepšit konkurenční výhodu a zvýšit firemní zelenou image
Podporovat inovace nových ekologických produktů a služeb
Poskytovat informace zúčastněným stranám

<p>Firma nedělá žádnou změnu obchodní politiky</p>	<p>Středně velká účetní společnost, poskytující nákladově efektivní řešení, měla až donedávna dobrou pověst, pokud jde o kvalitu poskytovaných služeb. Na druhou stranu firma neinvestuje do technologií a nedodržuje postupy udržitelnosti jako její o konkurenti. To začíná mít dopad na udržení zákazníků a nepřitahuje to ani nové obchodní klienty. Její pověst klesá spolu s jejím nízkým profilem CSR. Nemá žádné plány udržitelnosti a nesměřuje k zelenému obchodnímu modelu. Její obchodní praxe je silně závislá na papíru, zaměstnanci používají papír k zaznamenávání každého zapojení klienta a transakce. Lidé ve společnosti jsou vynikajícími uchovateli záznamů a velkými spotřebiteli papíru a papírenských výrobků. Nedostatek investic společnosti do ICT a konferenčních zařízení způsobuje vysokou uhlíkovou stopu.</p>
<p>Firma se rozhodla investovat do managementu GHG – Úspory energie</p>	<p>Středně velký zemědělský podnik v Řecku se zabývá výrobou vína a výrobou olivového oleje a obchodem s nimi. Vzhledem ke změně vnitrostátních právních předpisů o podnikání s ohledem na změny klimatu, si tato společnost uvědomuje, že její emise skleníkových plynů a spotřeba energie jsou hraniční. Existuje tedy vysoká pravděpodobnost, že v blízké budoucnosti dostane finanční pokutu. Také množství odpadu vyprodukovaného z podnikové činnosti způsobilo zhoršení životního prostředí v regionálním ekosystému, čehož si všimli někteří obyvatelé okolí, partneři a místní orgány. Společnost se rozhodla investovat do řízení emisí skleníkových plynů a úspor energie s cílem zmírnit dopady změny klimatu, zlepšit svou ekologickou stopu, napravit potenciální negativní dopady, chránit svou pověst a image, udržet si slušnou úroveň spolupráce se zúčastněnými stranami a zůstat na cestě k udržitelnosti a růstu.</p>
<p>Firma se rozhodla investovat do chování zaměstnanců v souvislosti s emisemi skleníkových plynů a odpady</p>	<p>Reklamní společnost, která působí v Itálii, se rozhodla změnit přístup a postupy svých zaměstnanců tak, aby byly v souladu s její CSR. Chce investovat do firemního školení se zaměřením na chování svých zaměstnanců. Zaměstnanci budou vyškoleni v postupech úspor energie a snižování odpadu, které budou přínosem pro společnost z hlediska snižování nákladů, a vytváří kulturu optimalizace snižování nákladů s cílem zlepšit celkovou strategii. Společnost se také hodlá zaměřit na zlepšení své strategie CSR, pověsti a profilu tím, že přijme zodpovědnější způsoby jednání. To povede ke zlepšení jejího image na trhu.</p>
<p>Firma se rozhodla pro kombinace scénáře 2 a 3</p>	<p>Producent rajčat v zemědělském sektoru ve Španělsku má vlastní pěstební a sklízecí zařízení a stroje. Vlastnictví společnosti nedávno převzala 2. generace zakládající rodiny a současné vedení má inovativní myšlení a strategickou vizi pro podnikání. S vědomím změny klimatu a skutečného dopadu svého podnikání na životní prostředí (spotřeba energie, produkce odpadu, hnojiva, pesticidy atd.) si majitelé přejí realizovat projekt na snížení své podnikatelské environmentální stopy. S vědomím, že všichni obchodní aktéři mají velký dopad, chtějí investovat do firemního školení se zaměřením na chování zaměstnanců, aby podpořili úsporné postupy a snižování odpadu, které jsou přínosem pro společnost z hlediska snižování nákladů. Majitelé naplánovali schůzku se zástupcem zaměstnanců, pozvali místního zástupce a také externího odborníka na životní prostředí kvůli poradenství, aby diskutovali o projektu řízení skleníkových plynů a úsporách energie a školení zaměstnanců s cílem snížit provozní náklady, zmírnit dopady změny klimatu a zlepšit environmentální stopu podniku. Podmínkou, kterou je třeba považovat za samozřejmost, je to, že rozpočet společnosti na takovou investici není neomezený a majitelé se rozhodnou pro nákladově nejefektivnější řešení v každém rozhodnutí, které musí učinit.</p>

Pokyny společné pro všechny čtyři scénáře

- Jako facilitátor nejprve představte scénář, poté popište klíčové podrobnosti scénáře a poskytněte informace o úlohách, které mají být sehrány.
- Vyzvěte majitele firem, aby zahájili hraní rolí a podpořili své obchodní zájmy.
- Zástupci zbylých rolí se postupně zapojují do hry s vědomím svých cílů a potřeb. Všichni účastníci mohou radit zástupci své skupiny před i během hraní rolí a v případě potřeby přidat užitečné klíčové body do diskuse.
- Každé skupině položte některé otázky z nabídky, aby se usnadnila diskuse, která povede rychleji ke konečnému rozhodnutí účastníků o scénáři.

Struktura simulačního výcviku hraní rolí

Existují čtyři odlišné fáze, které by měl školitel dodržovat při zavádění simulační aktivity hraní rolí. Tyto kroky jsou podrobně popsány v plánu lekce každého scénáře:

Č	Etap	Popis
1)	Zahájení školení	Školitel komunikuje se všemi účastníky tím, že předem distribuuje potřebný materiál k prostudování. Konkrétně: <ul style="list-style-type: none"> a) materiál na rozdání účastníkům b) doplňkové informační listy Materiál může být distribuován několik dní před realizací simulační dílny pro hraní rolí. V závislosti na úrovni dovedností účastníků a jejich předchozích znalostech o daném tématu se školitel může rozhodnout, zda předem distribuuje také „Karty rolí“ a „Listy otázek pro role“, aby se účastníci lépe připravili na simulační trénink. Tím však není účastníkům přidělena žádná konkrétní role před samotným workshopem, protože se jedná o úkol, který se vyskytuje v další fázi.
2)	Příprava a vysvětlení tématu školitelem	Jedná se o úvodní fázi simulačního tréninku, kdy se školitel zaměřuje na téma, přiřazuje role, vytváří postupy, shromažďuje veškerý potřebný materiál a začíná organizovat učebnu. Tento krok vyžaduje dobrou přípravu od školitele, který by měl vzít v úvahu co nejvíce aspektů tématu a poskytnout výslovné pokyny k tomu, co se očekává.
3)	Příprava účastníků na zapojení do simulace hraní rolí	Přiřazení rolí a pokyny poskytované účastníkům. Vysvětlení rozdělení simulace hraní rolí na konkrétní úkoly a časová omezení. Účastníkům by měl být poskytnut dostatečný čas na prozkoumání svých rolí, kladení otázek a seznámení se se scénářem. Někteří mohou zažít tento druh učení poprvé, proto je důležité poskytnout tipy nebo příklady. Školitelé mohou přednášet nebo usnadňovat diskuse, které nabídnou další kontext a pokyny před hlavní simulační aktivitou hraní rolí.

4)	Skutečná simulační aktivita hraní rolí	Určitý stupeň nezávislého učení je poskytován i očekáván. Účastníci však musí být během činnosti stále vedeni. Je důležité jim připomenout pravidla, aby zůstali ve svých rolích nebo používali vhodné komunikační dovednosti. Školitel přebírá roli pozorovatele a zasahuje pouze tehdy, když je to nutné.
5)	Rozbor a reflexe	Před uzavřením hraní rolí by měl školitel koordinovat rozbor, který přispívá k získání dalšího vhledu do učiněných rozhodnutí a zobrazeného chování. Na základě zpětné vazby mohou školitelé vypracovat učební úkoly, objasnit nedorozumění nebo provést úpravy pro budoucí hraní rolí. Školitel uznává celkové emocionální zapojení studentů, jejichž sebereflexe může být integrována do celého hraní rolí po každém sezení, takže školitel má lepší pochopení a ucelenější představu o tom, jak aktivita probíhá.

Usnadnění simulačního výcviku hraní rolí

Tipy pro instruktáž

Stručné informace pro všechny účastníky hraní rolí by měly být jednoznačné a zcela v souladu s cíli. Musíte použít jasný úvod, který informuje účastníky o účelu hry, cílech a vašich vlastních (nebo programových) motivech a situačních definicích. Poskytněte základní informace o změně klimatu, které je třeba pro simulaci přezkoumat, spolu s klíčovými tématy a kontextovými podrobnostmi scénáře. Buďte dobře připraveni tím, že vezmete v úvahu co nejvíce aspektů tématu a zaměříte se na to, co se očekává od stážistů. Působíte jako facilitátor hraní rolí, představujete hru a simulační model před oficiálním otevřením akce na hraní rolí. Stážisté by měli mít dostatek času na to, aby si přečetli scénář, seznámili se se svými rolemi a kladli otázky. Více instruktážních tipů naleznete [zde](#).

Tipy pro skutečné hraní rolí

Převezměte roli pozorovatele a zapojte se pouze tehdy, je-li to nutné. Navzdory tomu, že jste přítomni, nebudete mít ve hře žádnou aktivní roli. Nechte simulaci plynout s každým novým přidáním závazkem. Investujte čas do poslechu projevů jednotlivých delegátů a sledujte průběh simulačního scénáře. Snažte se mlčet, minimalizujte svou obhajobu a nechte roli hrát svou práci. Nastavte dostatek času a prostoru pro delegáty (skupiny) k vyjednávání. Umožnit jim zapojit se do více kol jednání, aby bylo dosaženo cílů a průlomové dohody nebo řešení (ideálně konsensem). Vaším úkolem je připravit herce tak, aby se učili prostřednictvím hraní rolí, osobně se pohnuli a zapojili se co nejvíce. Je důležité jim připomenout pravidla, aby zůstali ve svých rolích nebo používali vhodné komunikační dovednosti.

Tipy pro rozbor

Jakmile byla jednání uzavřena a aktéři učinili konečná rozhodnutí, probíhá rozbor pomocí diskuze. Je to nejdůležitější fáze simulace a může trvat déle než skutečná hra (dokonce i dvakrát). Chcete-li ušetřit čas během rozboru, můžete klást otázky, které se vztahují na všechny, a čekat na ruce, nebo textové zprávy v chatu nebo hlasy všech. Dalším nápadem je pozvat účastníky, aby se během 1 minuty zamysleli nad budoucími možnostmi.

Součástí rozboru je i evaluační činnost. Zahrnuje 2 samostatné dotazníky, které by měli vyplnit všichni účastníci (individuální list hodnocení výkonu a list hodnocení simulačního výcviku). Vysvětlete účastníkům, proč je tato aktivita důležitá, a ujasněte jim, že dotazníky jsou anonymní a musí být

vyplněny jednotlivě, bez zásahu třetí strany. Neexistují žádné správné nebo špatné odpovědi a měli by odpovědět co nejupřímněji na základě svého individuálního názoru.

Nastavení prostředí

Hraní rolí v místnosti

Samotná hra by měla probíhat v tiché místnosti bez rušivých venkovních vlivů.

Hraní rolí online

Pro online událost si můžete vybrat online platformu, ke které máte přístup a kterou znáte. Takovou, která je uživatelsky přívětivá i pro účastníky hry. Je důležité, aby online platforma vybraná v simulaci nabízela funkci „breakout room“, aby zástupci jednotlivých týmů mohli soukromě v rámci svých vlastních skupin rozhodnout o argumentaci a strategii, kterou budou během vyjednávání následovat.

Role školitele

Vaše role školitele je hlavně v koordinaci simulační hry. Mezi vaše úkoly patří pozorně naslouchat všem účastníkům. Součástí vašich úkolů je také vyzvat zástupce skupin k akci a vhodně vyčlenit čas na krátkou prezentaci jejich návrhů. Jako první oslovte nejprve hlavní postavu (tj. vlastníky firem), to pomůže hru lépe rozproudit. Máte také za úkol hlídat čas a ohlašovat kolik minut zbývá do konce jednání. Také musíte být k dispozici, abyste poskytli další vysvětlení k diskutovaným otázkám. Chcete-li dosáhnout všeho výše uvedeného, měli byste působit jako facilitátor, takže musíte být hluboce obeznámeni s každým scénářem, jeho průběhem, rolemi a postavami, osobnostmi účastníků, specifickými částmi simulace a přesným časovým rámcem.

Kromě vás může být k dispozici také technický odborník, který zajistí hladký průběh hry. Technický expert vám může pomoci, pokud nejste dobře obeznámeni s uspořádáním a přípravou všech potřebných úprav pro on-line platformu pro hostování simulace. Odborník může být také k dispozici, aby poskytl příslušnou podporu s technickým vybavením, kdykoli je to potřeba během hraní rolí. Přítomný může být také odborník na zelenou ekonomiku a CSR.

Vybavení, nástroje, zdroje

V rámci této příručky jsou také uvedeny některé užitečné informace týkající se vybavení, nástrojů a zdrojů potřebných pro provádění hraní rolí. Všimněte si také, že existují některé zvláštní požadavky, které je třeba zvážit, v závislosti na tom, zda simulační školení probíhá v tradiční třídě jako osobní událost nebo prostřednictvím online platformy jako virtuální událost. Více informací o těchto typech naleznete [zde](#).

Vyhodnocení simulačního výcviku

Simulační výcvik by měl být vyhodnocen po dokončení hraní rolí. Za tímto účelem byl vypracován [dotazník](#), který by měl být distribuován všem účastníkům. Všimněte si, že dotazník je společný pro všechny simulační scénáře.

1. Introduction

Human activities have been affecting the natural greenhouse over the last decades, so that climate change is considered among the most pressing challenges that global society is facing today, with multiple negative effects on economic development, social progress and environmental sustainability (Hepburn, O’Callaghan, Stern, Stiglitz & Zenghelis, 2020). Actions can and must be taken to reduce those negative impacts in the future.

Companies have certainly a critical role to play in this climate change challenge, which renders them across the globe, especially the **small- and medium-sized enterprises (SMEs)** (Bradford & Fraser, 2008; Kerr, 2006). They are in position to lead the way towards a healthy and more sustainable future by putting a lot of effort to reduce their GHG emissions and waste production, use energy efficiently and apply more green practices that can actually save money and achieve economic growth (Delmas, Nairn-Birch & Lim, 2015; Hoffman, 2005).

Despite the risks that companies face due to climate change implications, there is a growing interest in the opportunities arising by taking climate action. However, companies and particularly SMEs appear to lack the **skills or competencies** to set appropriate targets and act in the right direction for responding to climate change (Bradford & Fraser, 2008; Kerr, 2006). More **training is needed** for them to turn green through reducing emissions and waste production, adopting CSR strategies and green policies, fostering innovation and green technology applications, or focusing on their staff training to use energy efficiently (Ockwell & Byrne, 2016).

They also need to develop **new skills** and receive proper **guidance** that will contribute to setting robust and credible targets in line with the current climate change expectations. Specifically, companies need strong guidance about **GHG measurement** methods and procedures so as to first measure and then decrease their emissions. Applying **energy-saving practices** and using relative **technology applications** that reduce the GHGs produced will provide precious opportunities for **cost reduction**, with which companies need to be acquainted without any further delay (Bradford & Fraser, 2008; Kerr, 2006).

Climate-related **penalties or fines** and strict **legislative frameworks** have also been added to the themes that companies need some guidance about. Sustainable practices such as energy, fuel or water efficiency and consumption, along with material reuse or conservation, are only some of the practices that depend greatly on individuals within a company. Thus, companies need guidance about ways to promote appropriate **behaviour among their staff** and raise the **staff awareness** on efficient use of energy and waste production regulation that can further contribute to cost reduction. To achieve that, companies need to focus on their individuals at micro-level, so as to consider both personal and corporate sustainability **values** and align them together. Those values constitute a fundamental aspect for the establishment of a common **sustainability-related goal**.

Accordingly, it is important that a relative **strategy** is built for increasing the **Corporate Social Responsibility (CSR)** of companies (Hepburn et al., 2020), oriented both internally and externally, involving the staff and engaging them actively in the process. This can ensure an **enhanced corporate green image** and more **positive reputation**, among other CSR benefits in the long-term, which may further contribute to the development of a solid **competitive advantage** (Bradford & Fraser, 2008; Kerr, 2006).

Two more key-themes that companies need guidance and upskilling regard the **innovation** of new green products and services, along with **CSR disclosing** and relative information provided to important

stakeholders about the company's CSR initiatives, green policies applied and respective business processes undertaken (Bradford & Fraser, 2008; Kerr, 2006).

Through appropriate training and upskilling, along with an essential amount of work, time, or money, sustainable strategies will reduce the environmental impact of businesses, save money, and help position companies for growth (Brown & Southworth, 2008). Towards this direction, trainers and VET providers can employ **simulation-based training** which can be proved very effective for the development of the necessary knowledge, skills and competencies of entrepreneurs related to the adoption and application of green practices as well as enhance the cultivation of their attitudes towards the necessity of green transition.

The overall **objective of the IO2 training package** is to equip VET providers and trainers with a training package so as to be able to successfully implement simulation-based training activities addressing people from private entities and entrepreneurs to require knowledge, skills and individual competences so as to better understand the impacts of climate change and how to apply effective measures that mitigate such impacts by reducing their GHG emissions, saving energy, decreasing waste, applying green technology, fostering innovation through new green products and services, training staff to use energy efficiently, raising staff awareness about energy consumption and waste production. Participants in the proposed simulation activities under the facilitation of VET trainers will also be able to negotiate the need of performing eco-friendly practices and actions in their companies, initiate, form, maintain and manage green organizational policies, which ensure sustainability through building an improved corporate green image and a stronger competitive advantage.

2. Scope of the Handbook

This handbook constitutes a tutor manual enclosing content of the [four \(4\) different climate change scenarios](#) selected in the GoGreen project. It introduces all necessary documents and material for the successful implementation of the simulation training. For each simulation scenario it presents:

- *The description of the Scenario, including:*
 - *Content (learning outcomes, duration, number of participants)*
 - *Script (case, contextual details, roles)*
 - *Case flow*
 - *Lesson plan*
- *The [Annexes](#), with materials and templates to be distributed to the trainees, including:*
 - *Trainees' handout*
 - *Warm up activity*
 - *Role cards*
 - *Question sheets for roles*
 - *Individual performance evaluation Sheet*
 - *Extended information sheet*
 - [Evaluation of the Simulation Training \(common for all scenarios\)](#)

The handbook entails also a section about the “[Facilitation of the Role-playing Simulation Training](#)”, which includes:

- [Tips for Briefing](#)
- [Tips for Debriefing](#)
- [Environment settings](#)
- [Staff involved](#)
- [Equipment, Tools, Resources](#)

3. Target Group

The present handbook is intended for **trainers and VET providers**, who wish to embed simulation-based practices in their teaching. It aims to help them advance their teaching methods, content and techniques, so as to provide learners (Private entities and entrepreneurs) with the required knowledge, skills and individual competences to better understand the impacts of climate change and apply effective measures for mitigating such impacts.

4. Added Value – Motivation

A crucial element of role-playing simulation is the elaboration and analysis of differing scenarios, which allow potential action strategies to be developed and discussed in a realistic manner, but within a safe and supervised educational environment at the same time (Salas, Wildman & Piccolo, 2009). Such scenarios usually involve a specific setting and a temporal frame. They represent future problematic areas and difficult situations, or current deficiencies within the system, to which players (learners) are expected to respond (Waxman, 2010). The task for the participants is to articulate ideas, information and arguments in a way that is consistent with their role given. Within such a framework the tutor maintains strong control over the focus of the role-playing, while allowing participants to explore the role through their control over the exact language of the speech (Salas et al., 2009; Waxman, 2010). According to Alden (2000), the most precious benefit deriving from this form of training is that it gives scope for participants to reflect on their learning, while giving the instructor security from the fear that the activity would “get out of hand” and wander from the desired focus of the role-playing (p. 128).

The GoGreen training involves role-playing simulations that are dealing with the impacts of climate change and the actions that companies can take to respond to this challenge. Both trainers and learners will get familiar with the topic, in order to expound on the broader issue of Climate Change and its impacts, as well as companies’ various mitigation measures placed at the core of the scenarios’ content. The [four \(4\) scenarios](#) developed refer to respective and separate role-playing simulation activities, corresponding to the modules and competency areas identified within the GoGreen project. Each of the four scenarios has its own story and different challenges that focus on problems or cases appropriate to the discipline and course level. Through the simulation-based training, all participants (people from private entities and entrepreneurs) are expected to acquire deep knowledge, skills, and competences relative to the broader issue of climate change and its impacts. The simulation scenarios intend to develop also their critical thinking, problem-solving, negotiation, collaboration and decision-making skills. The four (4) scenarios are presented in the following graph.

GoGreen Scenarios

Scenario 1: Business as Usual (No change at business policy)

High Greenhouse Gas (GHG) emissions which affect the climate
Penalty/fined risk
Missed opportunities for cost reductions
Bad marketing image – No Corporate Social Responsibility (CSR)

Scenario 2: The Company decides to invest in GHG Management – Energy Savings

Measure and reduce GHG emissions
Reduce costs by saving energy policies/ technology applications
Increase Corporate Green Image
Avoid penalty-fines
Improve Competitive Advantage

Scenario 3: The Company decides to invest in staff behaviour about GHGs emissions and waste

Reduce costs by training the staff on how to use efficiently energy
Raise awareness of energy consumption and waste production
Corporate Social Responsibility (CSR)

Scenario 4: Mixture of 2nd and 3rd Scenarios

Measure and reduce GHG emissions - Reduce costs by saving energy policies – technology applications
Reduce costs by training the staff on how to use efficiently energy
Raise awareness of energy consumption and waste production.
Avoid penalty-fines
Increase Corporate Green Image
Improve Competitive Advantage – First mover advantage
Encourage Innovation of new green products and services
Provide Stakeholders information

5. Structure of the role-playing simulation training

There are four distinct stages that a trainer should follow while implementing a role-playing simulation activity:

N	Stage	Description
1)	Initiation of the training	<p>The trainer communicates with all participants by distributing in advance the necessary material for them to study. This refers to:</p> <ul style="list-style-type: none"> (a) the trainees' handout, and (b) the extended information sheet <p>The material can be distributed a few days before implementing the role-playing simulation workshop. Depending on the skills level of participants and their prior background knowledge on the subject, the trainer can decide whether to distribute also in advance the "Role Cards" and the "Question Sheets for Roles", so as to better prepare the participants about the simulation training. Yet, this is without allocating any particular roles to the participants before the actual workshop takes place, since it is a task occurring in the next stage.</p>
2)	Preparation and explanation of the topic by the trainer	<p>This is the opening stage of the simulation training, where the trainer focuses on the theme, assigns roles, creates procedures, gathers all the necessary material, and starts arranging the classroom. This step requires good preparation from the trainer, who should take into account as many aspects of the theme as possible and provide explicit instruction of what is expected.</p>
3)	Trainees' preparation for involvement in the role-playing simulation	<p>Roles' assigning and instructions provided to participants. Explanation of the breakdown of the role-play simulation into specific tasks and time constraints. Adequate time should be given to trainees for researching their roles, asking questions and becoming comfortable with the scenario. Some may experience this kind of learning for the first time, thus, providing tips and/or examples is important. Instructors can give lectures or facilitate discussions that will offer further context and guidance prior to the main role-play simulation activity.</p>
4)	Actual role-playing simulation activity	<p>A degree of independent learning is both provided and expected. Yet, trainees still need to be guided during the activity. It is important to remind them of the rules, so that they stay in their roles or use appropriate communication skills. The trainer takes on the role of observer and interjects only if and whenever necessary.</p>
5)	Debrief and Reflection	<p>Before closing the role-play, the trainer should coordinate debrief, which contributes to gain further insight into decisions made and behaviors displayed. Based on feedback, trainers may elaborate on learning tasks, clarify misunderstandings, or make adjustments for future role-plays. The trainer acknowledges the overall emotional involvement of learners, whose self-reflection can be integrated throughout the role-play and after each session, so that the trainer has a better understanding and a more rounded picture of how the activity is going.</p>

6. Simulation Scenarios

Scenario 1

Content

Learning Outcomes

Through this simulation scenario, the participants (private entities and entrepreneurs) are expected to acquire deep knowledge, skills and competences relative to the broader issue of climate change and its impacts. Particularly, at the end of the simulation participants will:

[Knowledge]

- know about the impact on their businesses when not adopting green business strategies
- be acquainted with the effect of high GHG emissions on climate change
- recognize how penalties and fines relate with GHG emissions
- identify what CSR is and comprehend why its absence relates with their bad company image
- know to outline how green practices and cost reduction are related
- identify missed opportunities for cost reduction

[Skills]

- be able to analyze the loss of not adopting a green strategy (not changing the business policy, not taking any action and keeping business as usual) in terms of cost reductions and corporate image
- be able to assess the risk of penalties or fines to be imposed due to high GHG emissions

[Competences]

- be in position to estimate the implications of CSR inactivity and the impact on the company's marketing image
- be in position to think critically about the role of businesses in the climate change issue
- be in position to appreciate the position and viewpoint of other stakeholders (e.g., clients) influenced by climate change impacts and with regulators of green policies

Number of Participants

Three roles are planned to be represented by groups of three (or more) participants, who will argue for their interests, but they will speak out as a single delegate. All of the delegates are concerned with the climate change issue and its impact but for different reasons. Some will have strong records of environmental protection and emissions reduction actions, or ideas that will attempt to support vividly. Others will be concerned about the potential loss of jobs or revenue and the worsening of their interest by taking actions against climate change.

Duration

2-3 hours allocated per stage:

- 10-15 minutes for the preparation and explanation of the topic by the trainer
- 20-35 minutes for the group assignments and the trainees' preparation to get involved in the role-playing simulation

- 30-55 minutes for the actual role-playing/simulation activity, presentations and negotiations (duration depending on the number of roles/groups/participants)
- 60-75 minutes for the debrief and reflection process (debriefing discussion)

Scenario Script

Case

The scenario focuses on a hypothetical medium-sized **accountancy company** that has been working for over 20 years in the accountancy **sector in Europe** with 10 employees. It has a diverse range of clients across many agricultural, manufacturing and services sectors and the size of its customers range from sole-traders (self-employed individuals) to family-run businesses. It provides the following services: secretarial services, bookkeeping services, management accounting, financial statements for all legal entities, advisory, consultation and due diligence, tax related services, and payroll.

The company has grown significantly over the past 10 years in terms of staff headcount from 10 employees to more than 100, turnover and client numbers. The company provides reliable, cost-effective solutions and up until recently had a good reputation in the business community regarding the quality of the services provided, but it is now becoming a low-tech operator and has not embraced technology or sustainability practices like many of its competitors and this is beginning to impact on customer retention and attracting new business. The company's reputation is declining along with its CSR profile.

Even though the accountancy company has heard of the imminent climate crisis, the EU Green Deal, COP26 event and all related activities set at National and EU level, but it has prioritized other business strategies such as growth and has not focused its attention on the impact its activities are having on the environment or climate change. Therefore, the company has no sustainability plans in place and has not yet begun moving towards a green business model.

In fact, the company business practice is heavily reliant on paper, employees use paper to record every client engagement and transaction. Notes are taken, documents prepared, and memos generated – all printed and filed away! People in the company are excellent record keepers and large consumers of paper and paper products. The company's lack of investment in ICT and e-conferencing facilities has resulted in all client consultation taking place face-to-face with spiraling travel and meeting costs being faced by the company as they have grown. The company's carbon footprint is estimated to be high.

Key Contextual Details

The company of this role-playing simulation scenario does not have to decide to change its policy. Perhaps, it considers the notion of moving to a paperless office environment in the future, but for now there is no decision to be made. Thus, the company insists on keeping the business as usual, whilst acknowledging the opportunities missed by not changing the policy or not taking action. There are several pros and cons when adopting a paperless office policy, which are presented here, and the role of the Environmental Officer may suggest that there are other entities that apply a recycling policy, use digital storage, etc. with the following advantages:

- Less paper use eliminates paper waste reducing the environmental impact of the company: this in turn has a positive impact on GHG emissions

- Introducing a paper recycling policy and supporting it with recycling facilities in the office ensures that less paper ends up in landfill and can be marketed by the company as part of its sustainability and green actions (CSR strategy)
- Significant Cost Savings: Keeping everything stored in a digital format. Whether on computer drives, flash drives or in cloud-based systems, it is cheaper than printing and storing it on paper. This eliminates the cost of shredding services for paperwork with sensitive information. Some businesses have entire rooms and storage units devoted to archiving paper. Paperless systems eliminate this cost.
- Speed of Information: When everything is stored digitally, versus on paper in files, accessibility becomes quick and easy. Employees, consumers, and business owners have access to all data, contracts, and consumer files with just a few mouse clicks. This eliminates having to locate the files or forms, which saves everyone time.
- Mobile Workforce: Moving from paper to digital storage, particularly through cloud-based technology, keeping information based on the internet has made it easier to have mobile employees. There is more flexibility to meet with clients outside the office or to spend a day working from home. Employees can access all information online, quickly, and easily. Often, remote workers don't even work in the same city as the business owner, which means a new pool of talent is available to employers, as well.

Roles

Three main roles are entailed in the current scenario and they are described below:

1. **The Business Owner** is not sufficiently informed about the environment or environmental practices at present and therefore not motivated to change. The Business Owner believes that using paper is essential and critical to their operations. From a compliance and regulatory point of view, he/she does not trust technology sufficiently well to consider moving paperless. The Business Owner is also very happy with how things are and currently working, systems that have been in place for years and thinks the move to paperless offices is just the latest in a long line of inane trends.
2. **The Office Manager** is a well-informed person who believes that using paper is fundamentally wrong, damaging to the environment and not necessary at a time when technology, security systems and computer applications provide a viable alternative that has a reduced environment footprint. Not only is a move toward a paperless office more cost effective, it also saves time and offers more efficient work practices and makes a positive environmental contribution. Also, the Office Manager is familiar with the business actions already taking place. Perhaps he/she agrees that a change in business policy will be a positive step for the company, but he/she also has to support the business owner and might not be willing to take the risk of changing. He/she may agree to keep business as usual, despite the fact that he/she understands the missed opportunities, acknowledges the bad marketing image and everything noticed by the environmental officer.
3. **The Environmental Officer** is employed by the Local Authority to enforce the waste management plan for the region (impose fines and penalties) but also work with the business community and companies to inform them of their responsibilities, incentivize them to make positive environment changes and highlight the good practices that are taking place at regional level (marketing and supporting CSR). He/she can also refer to that others (competitors/partners/suppliers) have started to take action and change their policy or consider the increased green expectations of their clients (or the community).

Case Flow

First, the facilitator/trainer introduces the case, then describes the [key contextual details](#) of the scenario and provides detailed information of the roles/characters to be played.

The scenario's business represented by its owner initiates the role-playing. This role/group attempts to discuss with other actors/groups, supporting the business interests. The rest of the delegates (i.e., the office manager and the environmental officer) engage in role-playing by the same token. All participants are allowed to advise their group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary. Specific questions are asked to each group/delegate, to facilitate discussion that will lead faster to the participants' final conclusions about the scenario. The scenario's business represented by the owner initiates the role-playing. The business owner chairs the meeting with the office manager and the environmental officer, following the routine inspection. During the debriefing meeting, the owner and the office manager discuss what they are missing if not change their business policy and debate whether the business should go paperless as a first step in a positive move towards environmental action or sustainability. All three characters engage in role-playing, with the following questions asked to each character to facilitate discussion. The first round of negotiations will assist participants to their final decision about the scenario. Typical questions could include:

- [for the business owner]

Why is it necessary to implement changes within the business? How can we determine if the staff would support such a move or change? How much is it likely to cost to make the changes proposed and will it support our operations or bring additional risks? Is the technology reliable enough to replace the use of paper, what will be the risks, what will be the cost to train our staff? If yes, is it worth it? How can we explain the reasons why paper is fundamental to our business? What impact are we having on the environment?

- [for the office manager]

Which sustainable green actions can be followed in our everyday working tasks to reduce paper consumption and waste? Can we provide solutions to the key clients online that demonstrate our ability to respond to the climate crisis and still offer an excellent service? Can we highlight the benefits of this move at cost and marketing image level and motivate the business owner and team to consider this approach?

- [for the environmental officer]

What are the penalties and fines for not going green, keeping business as usual and continuing to use plenty of paper? Can we form a list with the negative impact that people from the company are having on the environment by doing nothing? Are there other initiatives that they could take to be more environmentally sustainable? Is there an appetite or motivation amongst this company to embrace change? What are the incentives to change and move away from the status quo? How damaging is doing nothing having on their external public image – what feedback can I offer as an external expert in the sector?

The first step includes allowing time and space to the participants to discuss the above questions. The goal is to think about different and opposing perspectives through role-playing. Towards the conclusion of the role-playing (and surely after the discussion has proceeded well and has reached at a satisfying level close to what had been initially anticipated), the actors/participants should be asked to conclude their discussion by accepting of all final resolutions suggested with either:

- A. A common agreement not to change the policy and reject the notion of moving to a paperless office environment and insist on keeping their business as usual.
- B. Moving to a paperless office environment by changing the policy or taking action in the future business plans.

Both options signify that the participants have identified and comprehended well what the company misses opportunities if not changing the policy or not taking action.

The Lesson Plan of the 1st scenario follows right after, while in [Annexes](#) there are also the respective:

- [Trainees' Handout](#),
- [Activity Sheet](#),
- [Role Cards](#),
- [Question Sheets for Roles](#),
- [Individual Performance Evaluation Sheet](#),
- [Extended Information Sheet](#).

Lesson plan

Steps	Timing	Equipment	Material	Advice/Tips for the facilitator	Further Reading/ Link to Resources
Introduction [1] Welcome participants [2] Brief introduction to the topic [3] Warm up activity The correct answers to the first activity are: a=True, b= False, c= True, d= False, e=False. Some keywords examples for the second activity are: natural ecosystem protection, reduction in woody vegetation, land conversion	10-15 minutes	<ul style="list-style-type: none"> ● In-person event: A quiet lecture room needs to be set up. ● Online event: An online platform offering a “breakout room” feature (e.g., Zoom Meetings). 	Warm up activity sheet	This stage has to be short in time and is expected to take up to 15 minutes. Start arranging the classroom.	
Briefing [1] Background knowledge information Briefing of the theme. Ask questions to identify the knowledge capacity and the level of awareness that trainees have about paper consumption, the climate change issue and the GHG emissions of their business activity. Such questions can be: <ul style="list-style-type: none"> ● What deforestation is? ● Which sector contributes the most to deforestation? ● What practices does our company have that are unsustainable and damaging for the environment? ● What practices are we willing and which are not willing to change? 	10-15 minutes	Continue with the equipment used in the previous step.		Tips for Briefing	<u>Background knowledge</u> It can be found at the simulation scenario 1 (ANNEX I) - p.2 - section “Background” Key contextual details

<ul style="list-style-type: none"> • Why do we keep the same business practices and why are we not willing to change our business policy? • What is our current attitude on green policies? • What do our staff/co-workers think of the absence of current environmental actions/policy? • How likely are they to change their practices? • Is there any alternative plan? • How do important stakeholders (internal and external) perceive our absence of CSR activity and what impact this may have on our broader marketing image? <p>[2] Briefing of the theme Describe key themes and contextual details of the scenario:</p> <ul style="list-style-type: none"> – Less paper use – Introducing paper recycling policy and supporting it with recycling facilities in the office – Significant cost savings by using a digital format to store content. – Speed of information on paperless systems – Mobile workforce, use of cloud-based technology 					
<p>Preparation for the role-play</p> <p>[1] Introduction to the role-play simulation and goals</p> <ul style="list-style-type: none"> – Provide the handout to trainees and introduce the scenario case to them 	10-20 minutes	<ul style="list-style-type: none"> • In-person event: - Stationery (pens, paper, envelopes, folders, etc.) • Role-play online: 	Trainees' handout Role Cards Question Sheets for each role	Tips for Briefing Gather all necessary materials, and start arranging the classroom.	Describing roles – characters of the simulation Number of participants and Groups

<ul style="list-style-type: none"> Ask from trainees to form 3 (or more) groups with the same number of participants Explain the procedure to trainees <p>[2] Roles' assignments to the groups</p> <p>a) Provide detailed information for the 3 roles to be played in the scenario. You may give the appropriate Role Card to each group.</p> <ul style="list-style-type: none"> Business Owner Office Manager Environmental Officer <p>b) Explain to participants what their tasks are as delegates. At this point it will be helpful to give the Question Sheet for each role to the respective group.</p> <p>[3] Breakdown of role-play simulation into specific tasks & time constraints Explain the process of how to start the discussion.</p>		<p>An online platform offering a "breakout room" feature (e.g., Zoom Meetings).</p>			
<p>Simulation flow</p> <p>[1] Initiate the scenario Ask the "Business owner" delegate to initiate the role-playing.</p> <p>[2] Actual role-playing, simulation activity Invite the rest delegates (i.e., the Office Manager, the Environmental Officer) to engage in the role-play by the same token.</p> <p>[3] Presentation by the delegates of their group's view</p>	<p>30-55 minutes</p>	<ul style="list-style-type: none"> In-person event: <ul style="list-style-type: none"> Projector Main computer Sound/audio equipment (speaker, microphone, etc.) Tables and chairs Role-play online: <ul style="list-style-type: none"> Laptops Headphones Compatible hardware devices 		<p>Tips for role-play</p> <p>15 minutes may be invested for the presentation of the proposals by the delegates, which correspond to 5 minutes per group.</p> <p>The time remaining (40 minutes at most) may be invested in the discussions and negotiations between the groups.</p>	<p>Scenario Script</p> <p>Case Flow</p>

<p>Ask the 3 groups to present their view keeping the same order that they initiated the role-playing, so that they have enough time to better prepare their argumentation.</p> <p>[4] Discussion stage (multiple phases) Allow more rounds if necessary. Delegates (groups) may engage in multiple rounds of discussion. When the first round has been completed, a concern can be set to participants, to help the transition to the next rounds: “Each choice comes with a cost, along with its benefits. Try to consider and express in brief your thoughts about your view, regarding its costs or expenditures and the time required to be set in practice.”</p> <p>[5] Finalize the actual role-playing Finalize discussion. Ask actors to conclude by accepting of all final resolutions suggested with either: A. common agreement not to change the policy, reject the notion of moving to a paperless office environment and insist on keeping the business as usual. B. moving to a paperless office, changing the policy or taking action in the future business plans. Both options signify that the participants have identified and comprehended well that the company misses opportunities if</p>					
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not changing the policy or not taking action.					
Closing the role-play [1] Summary of the role-play and the decisions made. Towards the conclusion of the role-playing and surely after the discussion has proceeded well and has reached at a satisfying level close to what had been initially expected, a summary of the role-playing is necessary. Present in brief the final options signifying that the company misses opportunities if not changing the policy or not taking action.	5 minutes	Board to sum up the key points of the role-play	–	Sum up the views presented by the groups at each round of the discussion, trying to pique interest and pose questions that will facilitate moving on to the next stage.	Timing
Debriefing [1] Debrief Coordination Gain insight into the decisions made and behaviors displayed during the role-play. [2] Discussion Ask everyone to step out of their roles and reflect on the experience through focusing on the feelings, hope and call to action. Try to engage trainees in the discussion to encourage them to reflect on the experience and draw out insights from it. Based on the feedback received from the debrief discussion, you may elaborate on learning tasks, clarify misunderstandings, or make adjustments for future role-plays. You can facilitate the debriefing discussion by asking questions such as:	55-70 minutes	<ul style="list-style-type: none"> ● In-person event: - Stationery (pens, paper, envelopes, folders, etc.) ● Role-play online: The online platform used already in previous steps (e.g., Zoom Meetings). 	Results' sheet	Tips for Debriefing	

<ul style="list-style-type: none"> - How do you feel about your results? How do you come across any difficulties (or ease/possibility) to achieve them? - To what extent did your proposals produce the result you expected, or hoped for? Why or why not? - What impact do you envision the result you achieved will have on the interests you were representing? - To what extent is the result you achieved feasible? From an economic standpoint? A political standpoint? A social/technical/cultural standpoint? <p>[3] Reflection</p> <p>Acknowledge the overall emotional involvement of participants, whose self-reflection can be integrated throughout the role-play and after each stage. In this way, you can have a far better and more rounded picture of how the activity has been developed.</p> <p>Participants need to think about answers on specific questions. To find and pose the right questions, you must consider what is important to be discussed after the role-play. Examples for questions to ask are:</p> <ul style="list-style-type: none"> - How did the attitudes affect you? - What do you think you did well? - What do you think you might have done differently? <p>What is one thing you have learnt today that you will take into your business practice?</p>					
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Post assessment [1] Evaluation of the scenario 1 Ask the participants to assess their performance through a questionnaire, which entails queries related to the learning outcomes. [2] Evaluation of the role-playing simulation Ask the participants to fill in the relevant questionnaire	5-10 minutes	No additional equipment required	Questionnaire a) Scenario 1 evaluation b) Role-play Simulation questionnaire	The evaluation activity entails the completion of 2 separate questionnaires by the participants. Explain to participants why this activity is important. Make clear to them that the questionnaires are anonymous and should be completed individually, without any third-party intervention. There are no right or wrong answers, and they should reply as frankly as possible based on their individual opinion.	
Closing simulation Close the simulation by thanking all participants and any audience or sponsors, calling for brief applause.	1-2 minutes	No additional equipment required		Participants are allowed to leave the event.	

Scenario 2

Content

Learning Outcomes

Through this simulation scenario, the participants (private entities and entrepreneurs) are expected to acquire deep knowledge, skills and competences relative to the broader issue of climate change and its impacts. Particularly, at the end of the simulation participants will:

[Knowledge]

- learn about the measurement methods and scales of GHG emissions, how the carbon footprint of a business is estimated, as well as which are the basic practices for reducing GHG emissions
- be acquainted with how they can increase their corporate green image and acknowledge the produced benefits
- recognize why there are penalties/fines due to excessive GHG emissions production and how to act in order to avoid them
- comprehend specialized documents-reports on GHG emissions quantification
- be acquainted with the methods/ways to improve or gain a strong competitive advantage through applying green practices

[Skills]

- apply a simple carbon footprint measure technique
- apply energy saving practices and use technology applications to reduce GHG emissions production
- estimate the costs reduction by saving energy and use relative technology applications

[Competences]

- provide information to the important stakeholders, about their efforts to reduce energy consumption and production processes
- provide feasible solutions at micro level that correspond well to the regional climate change conditions, so as to reduce costs and increase the corporate green image
- adopt more green practices throughout the life cycle of a product or a service delivered to avoid penalty-fines and improve competitive advantage
- negotiate with local stakeholders influenced by climate change impacts, as well as with the regulators of green policies to increase corporate green image
- Comply with the current energy saving policies and measures

Number of Participants

Three roles are planned to be represented by groups of three (or more) participants, who will argue for their interests, but they will speak out as a single delegate. All of the delegates are concerned with the climate change issue and its impact but for different reasons. Some will have strong records of environmental protection and emissions reduction actions, or ideas that will attempt to support vividly. Others will be concerned about the potential loss of jobs or revenue and the worsening of their interest by taking actions against climate change.

Duration

2-3 hours allocated per stage:

- 10-15 minutes for the preparation and explanation of the topic by the trainer
- 20-35 minutes for the group assignments and the trainees' preparation to get involved in the role-playing simulation
- 30-55 minutes for the actual role-playing/simulation activity, presentations and negotiations (duration depending on the number of roles/groups/participants)
- 60-75 minutes for the debrief and reflection process (debriefing discussion)

Scenario Script

Case

The scenario focuses on a hypothetical **business unit** that is classified in **SMEs** and has been trading for over fifty years in the broader **agricultural sector in Greece**. Its business activity is twofold. It started out as a **wine-making** establishment (i.e., a winery) located in a rural area of northern Greece, owning a vineyard of 220.000 square meters along with a small-scale bottling facility, a warehouse for wine storage in barrels and the relevant basic equipment and machinery for the cultivation, harvesting and production operations.

Over the last few years, the company has extended its activity and engaged in the **production and wholesale trade of olive oil** as well, taking advantage of the 250 olive trees growing in its premises and an old building used as an olive mill (press) within its property that has been slightly renovated and set in function. The mean annual turnover of the business reaches approximately 550.000€. Its permanent staff consists of 15 people from various professional backgrounds and expertise (e.g., chemical engineer, agronomist, sales representative, machinery operators, crop workers, etc.) with appropriate tasks and duties. Seasonally, it hires extra manpower of 20-25 people during harvest periods.

Following a recent alteration on the national business legislation framework for SMEs so that they adapt to the new situation of climate change and respective international trends, the company discerns that its GHG emissions and energy consumption are borderline legal. Hence, there is a high possibility in the near future to receive a financial penalty-fine for that. What is worse, the amount of waste produced by its activity has caused some environmental deterioration in the already fragile regional ecosystem, which has been noticed by some nearby residents, partner firms and local authorities. Everything considered **the company decides to invest in GHG management and energy savings** in order to mitigate the climate change impacts and improve its environmental footprint, rectify potential negative effects, guard its reputation and image, retain a decent level of collaboration with its stakeholders and stay on course towards sustainability and growth.

Key Contextual Details

The agricultural SME of this role-playing simulation scenario decides to invest in GHG management (measurement and reducing) and energy savings through the use of technology, so as to follow the national framework and relevant legislative guidelines established recently for greening of businesses (particularly SMEs) and reducing their impact on climate change. By the same time the company will reduce costs, increase competitive advantage, increase its green image and avoid penalties and fines. The key contextual details to discuss and negotiate about during the role-playing are summed up at the following points:

- There are costs involved in **measuring**, monitoring and managing carbon emissions. But the financial opportunities of **reducing emissions** are clear. For example, it has been estimated that introducing energy-efficiency measures can reduce a SME's energy costs between 18% and 25%.
- A monitoring process/protocol to **quantify** how much carbon dioxide the business is generating. It will give the SME owners access to real-time data-related insights about how and where they use their energy. This transparency allows businesses to be smarter and more energy-efficient, providing them with an easy way to be more sustainable.
- There is a narrow margin for the company to avoid a **penalty-fine** due to its increased GHG emissions and the waste produced by its activity, which has had a noticeable impact on the ecosystem of the nearby area. Also, business activities are under close scrutiny by **stakeholders** with regard to their environmental impact. A corporate green image may offer the chance to reestablish their good relationships with the company.
- Investments in **renewables** that reduce emissions can deflect a penalty-fine chance and avoid higher costs from increasingly stringent climate policies. When the business switches to a renewable energy tariff, the next step will be to look into generating its own renewable power. Installing solar panels, for example, is a cost-effective way of ensuring the electricity used is entirely renewable. Except for reducing costs, it also enables businesses to diversify, bringing in a new stream of revenue along with an **improved competitive advantage**. If done right, it can be of low effort and high impact for the environment and the **corporate green image**. Making the switch to renewable energy not only reduces environmental impact, but contributes to the wider decarbonization across the national electricity network too.
- Energy efficiency improvements can deliver attractive returns on investment. Renewable energy can increasingly be purchased for the same price as fossil-fuel energy, or less.
- Electric vehicles (EVs) can deliver lower lifetime costs than the fossil-fueled ones. With the government looking to discourage the sale of internal combustion engine cars in the upcoming years, the business needs to choose the right vehicles to future-proof its operations. Particularly, the business can opt for replacing the two diesel type pickup trucks and its transporter van with respective EV models, since the switching to EVs can offer significant savings. Also, the business can take advantage of the government grants to offset the purchase cost, tax incentives, and lower maintenance and running costs. In this way, the savings can soon add up. By the same token, the business production lines can turn towards hybridization of their machinery, supplementing any fossil-fuel energy used now with cleaner electric power.
- Adopting a company-wide switch off policy. Turning the thermostat down by 1°C can reduce annual heating bills by up to 8%. Using energy-efficient lighting the SME can save about 2,000€ per year. Leaving computers and lighting on overnight or setting the production machinery on a standby mode instead of power off, would cost over 900€ per year.
- Putting a lot of effort on achieving high process efficiency. By optimizing current processes or introducing new more efficient ones, the company can minimize the required inputs and waste production. For example, it can exploit the timber of the olive trees pruning and sell it either for extra income or provide it to suppliers in order to achieve a lower price. Likewise, an investment in a light scale composting machine after harvesting the vineyard can create natural fertilizer that could mix with product waste to be used for the business crops, or be sold to partner companies

so as to bring extra income that could save half of the bottling facility operation costs. The reduction in using synthetic fertilizers could also contribute to GHG emissions from soils. Shifting to organic agriculture could have additional environmental benefits (Smith et al., 2008).

- Investments in more eco-oriented product design. The SME can re-design its products to reduce the required inputs, without sacrificing the product's utility at all. For instance, the bottling of the wine and the olive oil produced can be made also by recycled carton containers, limiting the use of plastic bottles and glass.
- Adopting a policy that prioritizes the eco-management of business waste disposal, materials reuse and recycling. In addition to reducing waste by improving process efficiency, the SME can reuse already-generated waste or production leftovers, and pass it along to other SMEs or large companies that may find it useful. This reduces significantly the cost of waste disposal. Also, the SME can reduce cost by considering the source of their own raw materials and switching to recycled ones. Organic material could be composted and incorporated to the vineyards/olive groves (carbon storage in the soil).
- Investments in infrastructure efficiency. The company can generate considerable savings associated with energy-efficiency lighting, building insulation and heating systems efficiency. The findings and outcomes of the ECOWINER project could be exploited <https://www.sustagric.com/ecowinery.html>.
- Taking into consideration packaging and transport, since they can greatly affect the company's carbon footprint. The SME can reduce costs by reducing the volume of packaging and/or by switching to local suppliers to decrease the shipping distances.

Roles

Three main roles are entailed in the current scenario and they are described below:

1. **The Business Owners** of the scenarios' business are interested in protecting the environment and addressing the climate change issue, but they are also concerned about the feasibility of switching from fossil fuels to alternative forms of cleaner energy and the potentially high cost of doing so. Furthermore, they are worried about how their business must act in order to adapt to the new legislation framework for SMEs in the agricultural sector with more strict boundaries now set regarding business GHG emissions and waste. At the same time, the business is trying to avoid receiving a penalty-fine due to the high level of GHG emissions produced by its activity, which has already impacted on the ecosystem of the nearby area. The corporate green image is thus included in their concerns, since its activity is now under close scrutiny by stakeholders with regard to its environmental footprint. While local pressure is rising for greening their business operations, the owners decided to **invest in GHG management and energy savings** to mitigate the climate change impacts, improve the business environmental footprint, guard its corporate green image, rectify any negative effects, retain a decent level of collaboration with its stakeholders and stay on course towards sustainability and growth. However, getting the business carbon-ready requires real commitment and a cultural transformation that should start with their decision. Leadership must communicate the firm's emissions targets and strategies to all employees and important stakeholders, considering monetary incentives for delivering on the targets. The business must also share its greening objectives, relative intentions and/or plans with its partners and suppliers, so as to jointly work with the supply chain and customers to reduce the carbon risk. This will help

optimize its resources and enhance its collaboration with all stakeholders—including customers, supply chain partners, local community— where green implications are directed, and, crucially, its future investors. Last but not least, the owners are aware of the opportunity arising from greening their business to improve its competitive advantage both by reducing operational costs and by adopting a corporate green image.

2. **The Local Community Representatives** belong to the regional association representing the interests of the local community and consist of people who are passionately concerned with the protection of their natural area. Well aware of the negative consequences of the abrupt expansion of industry into their region during the last decades, they suggest that the scenario's business activity further decreases the quality of the local environment and contributes to its deterioration and the air pollution. Many of the nearby residents feel that their environment and natural world should be protected at any cost. Therefore, they keep putting pressure on local authorities to take action by scrutinizing operations, GHGs production and waste management across local agricultural businesses, imposing penalty-fines to those that do not invest in new technologies and/or abstain from using cleaner energy. The association also requires some regular official information by businesses of their region with detailed reports on their footprint measurements and the fossil fuels consumption, along with any future plans for investment in eco-oriented products and operations.
3. **The State Representatives** (public services) are especially concerned with maintaining a strong economy and increasing population in rural areas. They are seeing a growing amount of concern about the climate issue from local communities, which has to be transmitted to the business community as well. Concerned climate scientists and environmentalists have collected a wide variety of data indicating that agricultural activity based on fossil fuels is changing the climate of both the local area and at a national level as well. In the past, reported observations remained outside of the debate for the impact of climate change, but new observations have revealed startling changes that comprise a cause of genuine concern to everyone in the local community. Meanwhile, fossil fuel companies insist that the phenomenon of global warming is yet unproven and that attempts to reduce usage of fossil fuels would come at a prohibitively high economic cost to the country. While those companies also suggest that the warming will be beneficial, the state needs to update the legislative framework for businesses, especially SMEs and those of the agricultural sector, imposing heavier penalty-fines to the companies that keep producing high levels of GHGs emissions. More incentives should also be given in consensus with the EU and the banking sector to support business investments in energy savings and new technologies for cleaner energy generation and usage, GHG management and recycling.

Case Flow

First, the facilitator/trainer introduces the case, then describes the [key contextual details](#) of the scenario and provides detailed information of the roles/characters to be played. The scenario's business represented by its owners initiates the role-playing. This group attempts to negotiate with other actors/groups, supporting the business interests. The rest delegates (i.e., local community representatives and state representatives) engage in role-playing by the same token. All participants are allowed to advise their group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary. Specific questions are asked to each group/delegate, so as to facilitate discussion and the first phase of negotiations that will lead faster to the participants' final decisions about the scenario. Such questions are:

- [for business owners]

Is it possible to measure, monitor and manage the business carbon emissions? How can this be done, what investments should be made? At what cost can this be implemented? How can they use technology applications to reduce costs by saving energy? How can they assess the monetary or any indirect benefits of turning to cleaner energy and investing in the GHG management and energy savings? How will this improve their competitive advantage? How will this improve their green image? What are the penalties and what practices can be used to avoid penalties? What is the faster way to build and maintain a green corporate image? How to provide the right information to stakeholders?

- [for local community representatives]

What actions need to be done to ensure that the regional environment and natural world are protected? How to increase pressure on local authorities to act against violations of regional businesses (penalty-fines) in terms of emissions and waste that causes environmental issues. Are there any official reports by the local business to provide required information to stakeholders describing the impacts of its activities on the environment and climate change? How to interpret such information and evaluate the corporate green image?

- [for state representatives]

Are there strong incentives suggested to the regional businesses that encourage their investment in clean energy, GHG management and energy savings? How can penalties be used? How to increase the awareness of the businesses about the significance of mitigating the impacts of climate change and improving its environmental footprint?

After the first phase of negotiations, a query can be set to participants, since each choice decided comes with a cost along with the benefits. They will have to consider and express in brief their thoughts about the investment suggested, regarding both the cost/expenditures and the time that the action needs to be performed.

Towards the conclusion of the role-playing (and surely after the discussion/negotiations have proceeded well and have reached at a satisfying level close to what had been initially anticipated), the actors/participants will be asked to conclude by deciding for one of the following three options. Each delegation should opt for:

- Acceptance of all the final resolutions suggested - total greening of the SME
- Amendment of the suggested resolutions and qualify the most suitable - GHG emissions reduction differently specified by each delegation
- Rejection of the suggested resolutions - extreme scenario ending with total disagreement among all parties/delegations involved

The Lesson Plan of the 2nd scenario follows right after, while in [Annexes](#) there are also the respective:

- [Trainees' Handouts](#),
- [Activity Sheet](#),
- [Role Cards](#),
- [Question Sheets for Roles](#),
- [Individual Performance Evaluation Sheet](#),
- [Extended Information Sheet](#).

Lesson Plan

Steps	Timing	Equipment	Material	Advice/Tips for the facilitator	Further Reading/ Link to Resources
Introduction [1] Welcome participants [2] Brief introduction to the topic [3] Warm up activity The correct answers are: 1 – C, 2 – E, 3 – A, 4 – B, 5 – D	10-15 minutes	<ul style="list-style-type: none"> ● In-person event: A quiet lecture room needs to be set up. ● Online event: An online platform offering a “breakout room” feature (e.g., Zoom Meetings). 	Warm up activity sheet	This stage has to be short in time and is expected to take up to 15 minutes. Start arranging the classroom.	
Briefing [1] Background knowledge information Ask questions to identify the knowledge capacity and the level of awareness that trainees have about their company’s consumption, the climate change issue and the GHG emissions impact by their business activity. Such questions can be: <ul style="list-style-type: none"> ● Does your business estimate its carbon footprint? ● What technology apps does your business use to reduce GHG emissions production? ● Does your business provide information to its important stakeholders about the level of climate change impact of its activities? ● What does the carbon footprint as a process of quantifying refer to? ● Can you name some sustainable practices that your business could take to reduce their emissions and become more sustainable? ● What may hinder your business from going green? [2] Briefing of the theme Describe key themes and contextual details of the scenario:	10-15 minutes	Continue with the equipment used in the previous step.		Tips for briefing	Background knowledge It can be found at the simulation scenario 2 (ANNEX I) section: “Background” p.3 Key contextual details

<ul style="list-style-type: none"> – Measure and reduce GHG emissions – Reduce costs by saving energy policies and technology applications – Increase corporate green image – Avoid penalties/fines – Improve competitive advantage – Provide stakeholders information 					
<p>Preparation for the role-play</p> <p>[1] Introduction to the role-play simulation and goals</p> <ul style="list-style-type: none"> – Provide the handout to trainees and introduce the scenario case to them – Ask from trainees to form three groups with the same number of participants – Explain the procedure to trainees <p>[2] Roles' assignments to the groups</p> <p>a) Provide detailed information for the three roles to be played in the scenario. You may give the appropriate Role Card to each group:</p> <ul style="list-style-type: none"> - Business Owners - Local Community Representatives - State Representatives <p>b) Explain to participants what their tasks are as delegates. At this point it will be helpful to give the Question Sheet for each role to the respective group. They will need to propose ways for GHG emissions reduction, land use changes, and climate finance pledges.</p> <p>[3] Breakdown of role-play simulation into specific tasks & time constraints</p> <p>Explain the process of how to start negotiating, propose actions and come up with a solution that serves their group's interests at most.</p>	10-20 minutes	<ul style="list-style-type: none"> ● In-person event: <ul style="list-style-type: none"> - Stationery (pens, paper, envelopes, folders, etc.) ● Role-play online: <ul style="list-style-type: none"> An online platform offering a “breakout room” feature (e.g., Zoom Meetings). 	Trainees' handout Role Cards Question Sheets for each role	Tips for the role-play Gather all necessary materials, and start arranging the classroom.	Describing roles – characters of the simulation Number of participants Briefing of participants
<p>Simulation flow</p>	30-55 minutes	<ul style="list-style-type: none"> ● In-person event: <ul style="list-style-type: none"> - Projector - Main computer 	Additional information that	Tips for the role-play 15 minutes may be invested for the presentation of the proposals by the	Scenario Script Case Flow

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<p>[1] Initiate the scenario Ask the “Business owners” group/delegate to initiate the role-play, supporting the business interests.</p> <p>[2] Actual role-play, simulation activity Invite the rest delegates (i.e., local community representatives and state representatives) to engage in the role-play by the same token.</p> <p>[3] Presentation by the delegates of their group’s proposals Ask the three groups to present their proposals keeping the same order that they initiated the role-play, so that they have enough time to better prepare their proposal and argumentation.</p> <p>[4] Negotiation stage (multiple phases) Allow more rounds if necessary. Delegates (groups) may engage in multiple rounds of negotiations. When the first round has been completed, a concern can be set to participants, to help the transition to the next rounds of negotiations: “Each choice comes with a cost, along with its benefits. Try to consider and express in brief your thoughts about your proposal, regarding its costs or expenditures and the time required to be set in practice.”</p> <p>[5] Agreement reaching Finalize negotiations by making a decision or establishing a final solution approved by all delegates (groups). Ask the actors to conclude by deciding for 1 of the following three options. Each delegation should opt for:</p> <ul style="list-style-type: none"> → Acceptance of all final resolutions suggested - total greening of business. 	<ul style="list-style-type: none"> - Sound/audio equipment (speaker, microphone, etc.) - Tables and chairs • Role-play online: <ul style="list-style-type: none"> - Laptops - Headphones - Compatible hardware devices 	helps trainees in their decisions	<p>delegates, which corresponds to 5 minutes per group.</p> <p>The time remaining (40 minutes at most) may be invested in the discussions and negotiations between the groups.</p>	
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<ul style="list-style-type: none"> → Amendment of the suggested solution and qualify the most suitable - GHG emissions reduction specified by each delegation differently. → Rejection of suggested solutions at an extreme scenario ending with total disagreement among the delegates involved. 					
Closing the role-play [1] Summary of the role-play and the decisions made. Towards the conclusion of the role-play and surely after the discussions and negotiations have proceeded well and have reached at a satisfying level close to what had been initially expected, a summary of the role-play is necessary. Present all the proposals and crucial decisions made by the groups at each round of negotiations. Describe in brief the final agreement or solution of the role-play.	5 minutes	Board to sum up the key points of the role-play	–	Sum up the final decisions made by the groups at each round of the negotiations, trying to pique interest and generate questions that will facilitate moving on to the next stage.	Timing
Debriefing [1] Debrief Coordination Gain insight into the decisions made and behaviors displayed during the role-play. [2] Discussion Ask everyone to step out of their roles and reflect on the experience, focus on the feelings, hope and call to action. Try to engage learners in the discussion to reflect on the experience and draw out insights from it. Based on the feedback received from the debrief discussion, you may elaborate on learning tasks, clarify misunderstandings, or make adjustments for future role-plays. You can facilitate the debriefing discussion by asking questions such as:	55-70 minutes	Use the same equipment with previous steps.	Results' sheet	Tips for Debriefing	

<ul style="list-style-type: none"> – How do you feel about your results? How do you come across any difficulties (or ease/possibility) to achieve them? – To what extent did your proposals produce the result you expected, or hoped for? Why or why not? – What impact do you envision the result you achieved will have on the interests you were representing? – To what extent is the result you achieved feasible? From an economic standpoint? A political standpoint? A social/technical/cultural standpoint? <p>[3] Reflection</p> <p>Acknowledge the overall emotional involvement of participants, whose self-reflection can be integrated throughout the role-play and after each stage. In this way, you can have a far better and more rounded picture of how the activity has been developed.</p> <p>Participants need to think about answers on specific questions. To find and pose the right questions, you must consider what is important to be discussed after the role-play. Examples for questions to ask are:</p> <ul style="list-style-type: none"> – How did the attitudes affect you? – What do you think you did well? – What do you think you might have done differently? – What is one thing you have learnt today that you will take into your business practice? 					
<p>Post assessment</p> <p>[1] Evaluation of the scenario 2</p> <p>Ask the participants to assess their performance through a questionnaire, which entails queries related to the learning outcomes.</p> <p>[2] Evaluation of the role-play simulation</p> <p>Ask the participants to fill in the relevant questionnaire</p>	5-10 minutes	No additional equipment required	Questionnaire a) Scenario 2 evaluation b) Role-play Simulation questionnaire	The evaluation activity entails the completion of 2 separate questionnaires by the participants. Explain to participants why this activity is important. Make clear to them that the questionnaires are anonymous and should be completed individually, without any third-party intervention. There are no right	

				or wrong answers, and they should reply as frankly as possible based on their individual opinion.	
Closing simulation Close the simulation by thanking all participants and any audience or sponsors, calling for brief applause.	1-2 minutes	No additional equipment required		Participants are allowed to leave the event.	

Scenario 3

Content

Learning Outcomes

Through this simulation scenario, the participants (private entities and entrepreneurs) are expected to acquire deep knowledge, skills and competences relative to the broader issue of climate change and its impacts. **The ultimate goal is to build an internal company strategy that can be sustained for the agency staff in the long term and benefit both the company's image and its impact on climate.** Particularly, at the end of the simulation participants will:

[Knowledge]

- recognize the importance of personal and corporate values, in terms of sustainability, to work towards their alignment
- identify organizational opportunities for sustainability awareness
- recognize the contribution of staff training to the reduction of enterprises' costs that are related to energy consumption
- identify opportunities to improve the CSR of their company through internal and external organizational CSR actions related to GHG emissions and waste management

[Skills]

- apply awareness practices for saving energy and reducing waste production within their companies
- be able to negotiate about how to apply concrete initiatives to improve CSR performance of their company

[Competences]

- adopt a corporate goal that promotes sustainable everyday business actions
- adopt an internal strategy for raising staff awareness related to the efficient use of energy and waste production
- adopt actions that align personal and corporate values in terms of sustainability
- provide feasible solutions for the familiarization of their staff about saving energy and reducing waste production in their business context
- adopt a strategy with specific business practices and actions to improve the CSR performance of their company

Number of Participants

Three roles are planned to be represented by groups of three (or more) participants, who will argue for their interests, but they will speak out as a single delegate. All of the delegates are concerned with the climate change issue and its impact but for different reasons. Some will have strong records of environmental protection and emissions reduction actions, or ideas that will attempt to support vividly. Others will be mostly concerned about the company's brand image.

Duration

2-3 hours allocated per stage:

- 10-15 minutes for the preparation and explanation of the topic by the trainer

- 20-35 minutes for the group assignments and the trainees' preparation to get involved in the role-playing simulation
- 30-55 minutes for the actual role-playing/simulation activity, presentations and negotiations (duration depending on the number of roles/groups/participants)
- 60-75 minutes for the debrief and reflection process (debriefing discussion)

Scenario Script

Case

The scenario focuses on a **business unit that specializes in advertising**. The so-called marketing agency aims to produce high quality **advertising products** and services for small- and large-scale organizations of various kinds (e.g., telecommunications, manufacturers, technology products, etc.). They are responsible for the pre- and post-production of commercial and non-commercial advertisements as well as digital marketing practices, being external collaborators with the relevant organizations.

The company is located in Nicosia, the capital of Cyprus. There are more than 60 people employed as permanent staff, including employees working in **managerial positions** (e.g., account directors, online advertising directors), **creative development** posts (e.g., copywriters, copyeditors, photographers, graphic designers) and broader **marketing** positions (e.g., media specialist, communication officers, digital marketing specialists). Staff with short contracts might also be hired during a media campaign. The company has expanded its activity both within the country and beyond, sealing collaborations with various EU companies.

The company owns large offices in the city center but some part of the permanent staff can also work remotely, depending on their duties and responsibilities. The company also owns facilities for production of TV spots, and they possess relevant equipment, from office-based material to IT/digital equipment for possible campaigns.

While working in various NGO campaigns related to climate change issues, the marketing agency decides to alter the practices followed by the staff within the company to be in line with a sustainable mission that they advertise (after all, they are advertising climate change action campaigns for other businesses-customers). Since the staff comes from different backgrounds that vary a lot, the company wishes to invest in corporate training that focuses on its staff behaviour. More specifically, employees will be trained on how to integrate energy-saving and waste reduction practices that will eventually benefit the company itself by providing opportunities for cost reduction. In this way, they will create a cost optimization culture within the company and harness cost reductions to improve the overall corporate strategy.

Along with that, the company intends to focus on improving its Corporate Social Responsibility strategy, reputation and profile, by adopting a more responsible way of action. This will lead to an improvement of its respective CSR image in the market. Following a strategic Corporate Social Responsibility, the company will be able to reduce its ethical, environmental, and social impacts to achieve a sustainable goal and common mission among its staff.

Key Contextual Details

Addressing unsustainable organizational practices is an important part of the overall improvement of a business environmental footprint. Therefore, the biggest challenge for companies lies in the matter of their business operation itself. Particularly for marketing agencies, it is much more important since they are dealing with the promotion of ethical behaviour of others through different goods and technical solutions, such as advertising campaigns etc.

The marketing agency in this role-playing simulation scenario is aware of this. As a first step towards sustainability, they decide to invest in building internal environmentally ethical practices through staff training. Their goal is to raise awareness about the change of staff behavior and attitudes about GHGs emissions and waste, aiming to reduce costs and improve the CSR of the company

The key contextual details to discuss and negotiate during the role-playing are summed up at the following points:

- Co-creating a **goal for sustainability** growth inside the agency. This includes negotiation between owners, managers, and staff to establish a common ground with the purpose of environmental protection and conservation of natural resources. To achieve this, they first need to **recognize both the personal and corporate sustainability-related values** and respective **needs** to work later towards their alignment with each other.
- Draft an **internal awareness strategy**, selecting the specific actions that will lead to the achievement of the inner **sustainability goal set**. The strategy can include the following:
 - **brainstorming** on possible ways the business staff can contribute to saving energy and reducing waste production. This means communicating the cost categories that can change based on the everyday actions undertaken by employees.
 - **discovering practices** that can **raise the awareness** of business staff about reducing energy consumption and waste production.
 - **aligning personal and corporate values** in terms of sustainability. This refers to the inclusion of sustainable actions formally and informally within the company. In the first case, the company can decide on the direct actions that are officially recorded, for example, in the job profile and responsibilities of the staff. Other formal actions include establishing a committee responsible for monitoring the processes followed or promoting lifelong learning on these issues. In the second case, the company can decide on the indirect actions that promote a culture promoting sustainability such as praise by the higher-ranking staff.
 - **co-structuring a common protocol** to be followed by the staff which can direct toward the application of **practices that save energy and reduce waste production and decide about the training activities that will follow so as people in the company to learn about this protocol**. This relates to everyday business actions that can be followed by owners, managers, and staff in building a business culture of sustainability. The practices can fall into the category of transportation, office material, food and should be effective and easy to maintain. The integration of such a strategy can be linked with the variable costs faced by the organization: once these costs are modified in line with the green practices proposed, they can lead to costs' reduction.
 - **brainstorming and discovering training opportunities** to promote staff's expected behaviour in terms of sustainability. This also includes outlining how the staff training can contribute to the reduction of enterprises' costs that are related to energy consumption.

- Co-building a strategy for **Corporate Social Responsibility**. By acting in a socially responsible manner, companies can benefit from their improved brand image and the good/positive reputation built. CSR supports companies to develop their brand awareness and image and leverage their resources for the better of their local and broader communities. Through engaging in CSR, companies can benefit in multiple manners, attract highly qualified and experienced staff, and even increase their bottom line. A CSR strategy can help organizations to identify the impact of their products and operation on climate change.

Roles

Three main roles are entailed in the current scenario and they are described below:

1. **The marketing agency business owners** of the current scenarios have a mission to invest in protecting the environment and ameliorate their company's impact on climate change. They are interested in creating a culture within their company and among all staff that aligns with universally accepted goals (e.g., the [17 Goals of Sustainable Development](#)) that reduce the business environmental footprint. It is their priority to educate the staff in applying green practices in line with a common goal that they have all established. The overall goal is to develop and follow practices that will eventually lead to their employees' familiarization with cost reduction and increase of the company's CSR, which will improve, subsequently, its market image. The owners are responsible for the policy and strategic actions to be followed, in collaboration with the staff. They are also aware of the financial benefits (eg. easier access to European grant schemes, more favorable bank loans and more support for private investors).
2. **The marketing agency managers** are interested in protecting the environment and addressing the climate change issue, but they are concerned about finding ways to sustain the staff's green behaviour. They are constantly in contact with the owners and participate in leadership actions and discussions with the business owners. These discussions include finding ways to engage the staff directly and indirectly with the identification and application of the practices that are considered energy-saving/waste-reducing. Along with that, they collaborate with the owners in developing the appropriate training and learning practices as well as increasing the Corporate Social Responsibility. They are in favour of establishing an effective management of resources, reduction of the environmental impact and improvement of the working conditions for employees. Last but not least, among their top priorities is the improvement of the company's image. They want to gain an advantage in the market over competing companies (to gain the favour of customers who consider sustainability as a very important issue.)
3. **The marketing agency staff** is the main target audience in this case, whose behaviour and attitudes the company wishes to positively influence. They are in direct contact with the managers to whom they express their concerns and opinions about the company's actions. They will be responsible for applying the practices directed by the leadership teams and ensuring that they abide by the corporate rules. Right now, they don't see much sense in why they should change their daily habits.

Note for the trainer: One way how to help the participants to get into their roles is by using eg. "substitute subject" or even costumes - it can be one easy fragment – for example a tie, or even a different name tag might work. Another way is to embrace the role more physically – by hanging posture, changing voice or gesticulation.

Case Flow

First, the facilitator/trainer introduces the case, then describes the [key contextual details](#) of the scenario and provides detailed information about the role-play technique and the roles/characters to be played.

Then the trainer assigns roles to participants and passes them **Role cards** and **Question Sheets for Roles** to study for 10-20 minutes.

Once the role-play starts, the scenario's business owners initiate the talking. This group attempts to negotiate with other groups, supporting the business interests. The rest (i.e., the managers and the staff) engage in role-playing, by answering specific questions that are asked to each group/delegate, to facilitate discussion. All participants are allowed to have the floor and advise their group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary. The first phase of negotiations will lead faster to the participants' final decisions about the scenario. Such questions are:

- [for marketing agency business owners]

What are the corporate values regarding sustainability? In which ways can we create a culture within our company that will reduce the business environmental footprint (i.e., infrastructure changes)? Can we decide on a specific goal for sustainability, along with the managers and the staff? How can we ensure that our staff follow green practices in their everyday working environment (i.e., monitoring mechanisms)? Can we promote training practices that will lead to cost reduction (i.e., leasing)? If yes, what will the specific measures be? Which are the internal organizational actions, related to GHG emissions and waste management, which once applied can improve the CSR of our company? Which external CSR practices/initiatives can we follow, involving the staff, to create a stronger brand image and corporate reputation?

- [for marketing agency managers]

How can we involve the staff in creating a common strategy for energy saving and waste reduction (i.e., introduction of a 'green ideas' box for their suggestions)? Which actions need to be done to ensure that the staff will follow and internalize/adopt these practices (i.e., increase of engagement)? How should we train the staff? How can we evaluate our CSR? What are the benefits of having a CSR strategy? What should be included in the CSR strategy to increase our respective market image? In which ways can the staff be involved in the CSR strategy?

- [for marketing agency staff]

What are the personal values we have regarding sustainability? Which sustainable actions can be followed in our everyday professional lives to reduce energy consumption and waste production (i.e., installation of automatic lighting)? Which are our needs in terms of training opportunities? Can we provide solutions to the key stakeholders regarding the CSR strategy of the company in which we operate? Is it possible to maintain these actions over a long period of time?

The above questions are useful as a guide/support/reflection for the simulation training and they do not need to be explicitly answered by the participants.

Towards the conclusion of the role-playing (and surely after the discussion/negotiations have proceeded well and have reached at a satisfying level close to what had been initially anticipated), the

actors/participants will be asked to conclude by deciding for one of the following three options. Each delegation should opt for:

- Acceptance of all the final resolutions suggested – a common strategy that includes energy saving and waste reduction actions to be followed by the staff, related to reduced costs, along with an internal and external CSR strategy.
- Amendment of the suggested resolutions and qualify the most suitable strategic actions.
- Rejection of the suggested resolutions - extreme scenario ending with total disagreement among all the parties/delegations involved.

The Lesson Plan of the 3rd scenario follows right after, while in [Annexes](#) there are also the respective:

- [Trainees' Handouts](#),
- [Activity Sheet](#),
- [Role Cards](#),
- [Question Sheets for Roles](#),
- [Individual Performance Evaluation Sheet](#),
- [Extended Information Sheet](#).

Lesson plan

Steps	Timing	Equipment	Material	Advice/Tips for the facilitator	Further Reading/ Link to Resources
Entry requirements Background info should be sent via email to participants a few days before the workshops so they can study the topic ahead.	3 days ahead of the training itself	participants email addresses and Extended Information Sheet	Extended Information Sheet	You can always add extra sources and interesting articles to read. All should be based on established science and useful for further use.	<u>Background knowledge</u> It can be found at the simulation scenario 3 (ANNEX I) - p. 3 - section "Background" Key contextual details
Welcome, introductions, warm up activities <i>Preparation and introduction to the topic.</i> <i>Warm Up activities</i> <i>Trainer starts a small discussion first.</i> Then trainees are asked to find and match the pairs of 6 statements. The correct answers are: 1 – C, 2 – A, 3 – B, 4 – E, 5 – D, 6 – F	10-15 minutes	<ul style="list-style-type: none"> • In-person event: A quiet lecture room needs to be set up. • Online event: An online platform offering a "breakout room" feature (e.g., Zoom Meetings). 	Short texts/phrases in 2 columns to make the matching (warm up activity).	The trainer welcomes trainees and initiates warm up activities to introduce the case.	
Briefing <i>Briefing of the theme. The trainer describes the key contextual details of the scenario.</i> At this stage, a few questions may be also useful for the trainer to identify the degree of participants' familiarity with the staff behaviour that impacts the climate change through GHG emissions produced and their familiarization with training practices and CSR - Which specific everyday activities conducted within a company relate to climate change,	10-15 minutes	Continue with the equipment used in the previous step.		Tips for Briefing	<u>Background knowledge</u> It can be found at the simulation scenario 3 (ANNEX I) - p. 3 - section "Background" Key contextual details

<p>specifically to energy consumption and waste production?</p> <ul style="list-style-type: none"> - How could people in the company learn how to use energy effectively and reduce waste production? - Are you aware of the term Corporate Social Responsibility? 					
<p>Trainees' preparation for involvement in the role-play simulation.</p> <p>Roles' assignments, getting into the role characteristics.</p>	10-20 minutes	<ul style="list-style-type: none"> ● In-person event: <ul style="list-style-type: none"> - Stationery (pens, paper, envelopes, folders, etc.) ● Role-play online: <p>An online platform offering a "breakout room" feature (e.g., Zoom Meetings).</p> 	Trainees' handout - Role cards	Tips for Briefing	Describing roles – characters of the simulation Number of participants and Groups
<p>Simulation flow</p> <p><i>Actual role-play, simulation activity.</i></p>	30-55 minutes	<ul style="list-style-type: none"> ● In-person event: <ul style="list-style-type: none"> - Projector - Main computer - Sound/audio equipment (speaker, microphone, etc.) - Tables and chairs ● Role-play online: <ul style="list-style-type: none"> - Laptops - Headphones - Compatible hardware devices 	No additional material required	Tips for the role-play Particularly, 15 minutes can be planned for the presentation of proposals by the selected delegates of each group (there will be 3 proposals in total, so it will take 5 minutes per group). The remaining time available (40 minutes at most) corresponds to the discussions and negotiations between groups.	Scenario Script Case Flow
<p>Closing role-play</p> <p><i>Summary of the role-play and the decisions made.</i></p>	5 minutes	No additional equipment required	–	Closing the role-play, the trainer sums up the final decisions made by the groups at each round of the negotiations.	–
<p>Debriefing</p> <p><i>Debrief, discussion and reflection.</i></p>	55-70 minutes	Use the same equipment with previous steps.	Results' sheet – (plain A4 page)	At the end of role-play, the trainer coordinates debrief, which aims to gain further insight into decisions made and behaviors displayed.	Debriefing and reflection The trainer can also prepare some sheets with real CSR strategies/

					examples of local companies CSR and share them with participants.
Post assessment a) <i>Evaluation of the scenario 3</i> b) <i>Evaluation of the role-playing simulation</i>	5-10 minutes	No additional equipment required	Questionnaire a) Scenario 3 evaluation b) Role-playing simulation questionnaire	The evaluation activity entails the completion of 2 separate questionnaires by the participants. Explain to participants why this activity is important. Make clear to them that the questionnaires are anonymous and should be completed individually, without any third-party intervention. There are no right or wrong answers, and they should reply as frankly as possible based on their individual opinion.	
Closing simulation <i>Thanking participants.</i> The trainer closes the simulation by thanking all participants and any audience or sponsors, calling for brief applause.	1-2 minutes	No additional equipment required	–	Participants are then allowed to leave the event.	–

Scenario 4

Content

Learning Outcomes

Through this simulation scenario, the participants (private entities and entrepreneurs) are expected to acquire deep knowledge, skills and competences relative to the broader issue of climate change and its impacts. Particularly, at the end of the simulation participants will be able to:

[Knowledge]

- recognize the measurement methods of GHG emissions
- comprehend how the carbon footprint of a business is estimated
- identify the basic practices for reducing GHG emissions and saving energy
- identify organizational opportunities for cost reduction through green technology applications
- relate the strong competitive advantage with the application of green practices and energy saving policies
- be acquainted with how to increase their corporate green image employing green practices
- acknowledge benefits produced by innovation, new green products and services
- acknowledge the significance of informing important stakeholders about green practices through their CSR business actions
- be familiar with practices that can raise the awareness of their business staff about reducing energy consumption and waste production
- relate reducing cost reduction with the training of staff to use efficiently energy
- be acquainted with how the business staff can be trained and contribute to saving energy and reducing waste production
- consider possible penalties and fines due to excessive GHG emissions production and know how to act in order to avoid them

[Skills]

- apply simple carbon footprint measure techniques
- apply energy saving practices and use green technology applications to reduce GHG emissions production
- develop and apply training strategies for the familiarization of their staff in practices of energy saving and waste reduction
- apply concrete initiatives to improve CSR performance, increase the corporate image and build a strong competitive advantage

[Competences]

- adopt more green practices throughout the life cycle of a product or a service so as to reduce costs, avoid penalties or fines and improve competitive advantage
- communicate effectively with stakeholders and provide CSR information about their organizational policy and efforts to reduce energy consumption and waste production processes
- provide feasible solutions at micro level that correspond well to the regional climate change conditions, so as to increase the corporate green image

- negotiate with local stakeholders influenced by climate change impacts, as well as with the regulators of green policies, to reach sustainable solutions
- encourage the training of their staff to use energy efficiently and minimize waste production

Number of Participants

Four roles are planned to be represented by groups of three (or more) participants, who will argue for their interests, but they will speak out as a single delegate. All of the delegates are concerned with the climate change issue and its impact but for different reasons. Some will have strong records of environmental protection, energy efficiency, emissions and waste reduction actions, or ideas that will attempt to support vividly by taking actions against climate change. Others will be mostly concerned about the potential loss of jobs or revenue and the worsening of their interest by any attempt to change and adopt more green practices and CSR policies that would enhance the company's brand image in the long term.

Duration

3 hours and 20 minutes allocated per stage:

- 15 minutes for the preparation and explanation of the topic by the trainer
- 35 minutes for the group assignments and trainees' preparation for the role-playing
- 60 minutes for the actual role-playing activity, presentations and negotiations (actual duration may vary depending on the number of the trainees involved or any additional roles/groups assigned to those participating)
- 80 minutes for debriefing discussion and reflection process, closing simulation
- 10 minutes for the evaluation of (a) the scenario and (b) the role-playing simulation

Scenario Script

Case

This scenario focuses on a hypothetical business unit that is classified as a **Tomato producer** founded in 1997 operating in the **agricultural sector in Greece** (or another Mediterranean country – this can be adapted depending on the training country). The company operates 5000 acres (2.240.000 sqm) of cultivated land located in the southern region of the country, owning half of the land and renting the other half of the land. The main crop product is the tomato which grows in different varieties like Elpida, Belladonna, Dafni, Cherry and Pomodoro. All tomato varieties and sizes can be packed in different packs like: One-row carton, double-row carton, triple-row carton, and plastic packaging (small net, box or cup).

The company has its own agricultural (growing and harvesting) traditional machinery and equipment. As a business unit, they have a facility of 1800 sqm used as a warehouse and for production tasks: sorting, grading, packing, storage, distribution and sale. The permanent staff consists of 6 persons in administrative taskforce (direction, sales and marketing, procurement, administration), 4 persons in production (warehouse, packaging, distribution and maintenance) and 5 persons in growing and harvesting (including land/crop operation and tractor drivers) summing up to 15 persons of permanent staff, but hiring seasonally 4-6 additional persons for harvesting and packing. The staff/personnel, both permanent and seasonal, comes from different background settings in terms of culture, education, environmental consciousness, etc.

The company ownership (management) has recently been taken over by the second generation of the founder family and the current management has a more innovative thinking and strategic vision for the business than the founding management. Being aware of the climate change and analyzing the actual framework and environmental impact of the business (energy consumption, production of waste, fertilizers and pesticides, etc.) the management is considering the possibility of implementing a project to reduce the environmental footprint of the business. But being also aware that all actors in the business have a great impact, they want to invest in corporate training with focus on staff's behavior to increase energy-saving and waste reduction practices that will eventually benefit the company itself by providing opportunities for cost reduction.

As this is a project that involves several actors, the business owners have planned a meeting with the staff representative, while they have also invited an environmental expert as an external professional to give advice, and a local representative to discuss their GREEN Project. This is a **project of investment in GHG management and energy savings and the staff training** in order to reduce costs of operation, mitigate climate change impacts and improve the environmental footprint of the business. A significant condition to be taken for granted pertains to that the budget of the company for such investment is not without limitation, thus, the management (business owners) will always opt for the most cost-effective path in every short- or long-term decision they have to make.

Key Contextual Details

The company owners have decided to implement a project of investment in GHG management and energy savings and staff and members training in order to reduce costs of operation, mitigate climate change impacts and improve the environmental footprint of the business. The key contextual details to discuss and negotiate about during the role-playing are summed up at the following points of the project of the business owners (management) proposal:

- Acquisition of **new low energy green tractors/truck/equipment**, and selling any old high fuel consumption equipment. Electric vehicles (EVs) can deliver lower lifetime costs than the fossil-fueled ones. With the government looking to discourage the sale of internal combustion engine cars in the upcoming years (until 2025 for companies' fleets), the business needs to choose the right vehicles to future-proof its operations. Particularly, the business can opt for replacing the two diesel type pickup trucks and its transporter van with respective EV models, since the switching to EVs can offer significant savings, especially in the long term. Also, the business can take advantage of the government grants to offset the purchase cost, tax incentives, and lower maintenance and running costs. In this way, the savings can soon add up.
- Installation of **solar panels on the warehouse roof**. Investments in **renewables** that reduce emissions can deflect a penalty-fine chance and avoid higher costs from increasingly stringent climate policies. When the business switches to a renewable energy tariff, the next step will be to look into generating its own renewable power. Installing solar panels, for example, is a cost-effective way of ensuring the electricity used is entirely renewable. Except for reducing costs, it also enables businesses to diversify, bringing in a new stream of revenue along with an **improved competitive advantage**. If done right, it can be of low effort and high impact for the environment and the **corporate green image**. Making the switch to renewable energy not only reduces environmental impact, but contributes to the wider decarbonization across the national electricity network too.

- Adopting a company-wide **switch off policy**. Turning the thermostat down by 1°C can reduce annual heating bills by up to 8%. Using energy-efficient lighting the business can save about 2,000€ per year. Leaving computers and lighting on overnight or setting the production machinery on a standby mode instead of power off, would cost over 900€ per year.
- Adopting a policy that prioritizes the **eco-management of business waste** disposal, materials reuse and recycling. In addition to reducing waste by improving process efficiency, the SME can reuse already-generated waste or production leftovers, and pass it along to other SMEs or large companies that may find it useful. This reduces the cost of waste disposal. Also, the SME can reduce cost by considering the source of their own raw materials and switching to recycled ones. Organic material could be composted and incorporated to the land (carbon storage in the soil).
- Investment in more **eco-oriented product packaging** trying to avoid plastic, since it heavily affects the business carbon footprint. The business can reduce costs by reducing the volume of packaging through applying innovative packaging techniques and also by switching to local suppliers to decrease shipping distances. Reestablish relations with current suppliers by considering their practices, products and services in terms of GHG emissions, environmental footprint and impact on climate change. Share information about potential common benefits by turning green.
- Investment in a basic general training for their staff about GHG emission and sources, effect on the environment, renewables, technology applications and efficient use of energy, in order to increase the general sustainability awareness of the staff.
- Investment in an initial training for staff about the application of specific everyday **practices that can save energy and reduce waste production**. This relates to actions that can be followed by owners, managers, and staff in building a culture of sustainability. The training practice will include the categories of transportation (personal and business related), office material, energy efficiency, food and waste generation.
- Creating a yearly competition with a Green Staff Award for the winner, that will be given to the employee that shows either the best GHG reduction results or the most innovative approach for reducing GHG emission. Award will consist of an honorable mention/distinction plus a small economic reward. Exact rules should be decided by the business owners (management) and agreed with the staff representatives.

Apart from the above clear objectives of the business owners (management), more wide and general aspects to discuss and negotiate would be:

- Costs involved in **measuring**, monitoring and managing carbon emissions. But the financial opportunities of **reducing emissions** are clear. For example, it has been estimated that introducing energy-efficiency measures can reduce a SME's energy costs between 18% and 25%.
- A **monitoring process/protocol to quantify** how much carbon dioxide the business is generating. It will give the SME owners access to real-time data-related insights about how and where they use their energy. This transparency allows businesses to be smarter and more energy-efficient, providing them with an easy way to be more sustainable.
- Energy efficiency improvements can deliver attractive returns on investment. Renewable energy can increasingly be purchased for the same price as fossil-fuel energy, or less.

- Putting a lot of effort on achieving high process efficiency, mainly **optimizing fertilizers and pesticides use**. By optimizing current processes or introducing new more efficient ones, the members can minimize the required inputs and waste production.
- Comparing the **fixed and variable costs** a business has to pay. There are fixed costs that cannot be changed within a company but there are some variable costs that can change based on the actions undertaken by an organization. It is important to identify which of these **costs relate to staff's everyday practices**.
- **Aligning personal and corporate values** in terms of sustainability. This includes inclusion of sustainable actions formally and informally within the company. In the first case, the company can decide on the direct actions that are officially recorded, for example, in the job profile and responsibilities of staff. Other formal actions include establishing a committee responsible for monitoring the processes followed or promoting lifelong learning on these issues. In the second case, the company can decide on the indirect actions that promote a culture of sustainability such as praise by higher-ranking staff.
- Co-building a strategy for **Corporate Social Responsibility**. By acting in a socially responsible manner, companies can benefit from increased brand image and reputation. CSR supports companies to develop their brand awareness and image and leverage their resources for the better of their local and wider communities. By engaging in CSR, companies can attract highly qualified and experienced staff, and even increase their bottom line. A socially responsible corporate strategy can help organizations to identify the impact of their product offering on the climate.
- Establish a CSR disclosure to provide all respective CSR information to the important stakeholders of the business. This contributes to a more positive corporate image and reputation, that may develop a stronger competitive advantage for the business in the long-term.

Roles

The four main roles entailed in the current scenario are described below:

1. **The Business Owners** are also the Management of the company and have the mission to make decisions and set policies that are in the best of their company's interests. In their daily operation, the main objective is to manage the financial matters of the business (annual budget, revenues and expenses monitoring, payments and wages, profit returns to shareholders, etc.) and manage the permanent and temporary staff and operations (supplies, production, sales, distribution, marketing and promotion efforts, communication, CSR etc.). In the long term, the Management (owners) is in charge of the strategic planning (goals, opportunities and investments), responsible for shaping and applying policies, coordinating procedures, representing the company externally/publicly, and engaging the staff into corporate operations and decision making.

The current owners (management) have adopted a more innovative thinking and strategic vision for the business than the previous generation and are much more conscious of effects and impact on the environment of the business operation and function (GHG emission, energy consumption, production of waste, fertilizers and pesticides) and the goals of their term of office is to reduce costs of operation, mitigate climate change impacts and improve the environmental footprint of the business.

At the same time, they strive to ensure the continuous education of the staff in line with the cutting edge of proper utilization of land, equipment/technologies, environmental protection, and tomato growing/production/processing. They are interested in creating a culture within their staff that aligns with universally accepted goals aiming to reduce the business environmental footprint. It is a priority to educate the staff in applying green practices in line with a common goal that they have all established. This will increase the company's CSR and improve its brand image at the market. Yet, it is important to keep in mind that the business budget is not without limitation, thus, the management (business owners) will always opt for the most cost-effective path in every short- or long-term decision they have to make.

All aforementioned will eventually lead to cost reduction and increase both the company and staff benefits.

2. **The Environmental Expert** is an external professional working as an **Environmental Consultant** for a private consultancy firm. He/She is an expert who can assess and monitor the impact of any activity on the environment, identify environmental issues, and provide solutions. He/She can also help companies to address environmental issues and reduce their environmental impact in areas such as water, air or soil contamination, waste production and management, etc., having extensive knowledge on environmental regulations and legislation, along with the scientific knowledge and technical expertise to perform environmental analysis, assessments and recommendations. The Environmental Consultant is also well aware of local, regional, national and EU financial funding opportunities for green/sustainable transitions for agri-food business. In this scenario, he/she has been invited by the owners to a meeting to provide some not-binding advice and pose his/her opinion in any question that may arise during the meeting.
3. **The Local Community Representative** serves the interests of the **regional association** which consists of people who are passionately concerned with the protection of the **local community** and its natural area. Well aware of the negative consequences of the abrupt expansion of industry into their region during last decades, the local community representative suggests that the scenario's business activity further decreases the quality of the local environment and contributes to its deterioration and the air pollution. Many of the nearby residents feel that their environment and natural world should be protected at any cost. Therefore, they keep putting pressure on local authorities to take action by scrutinizing operations, GHGs production and waste management across local agricultural businesses, imposing penalty-fines to those that do not invest in new technologies and/or abstain from using cleaner energy. Through its representative, the association also requires some regular official information by businesses of their region with detailed reports on their footprint measurements and the fossil fuels consumption, along with any future plans for investment in eco-oriented products and operations.
4. **The Company Staff Representative** reflects the opinion of the company staff, which comes from a great variety of education and cultural background. When hired, they are in general committed to several core values from the company such as respect, knowledge, cooperation and continuous improvement. However, the staff is also satisfied with how things are currently working, along with the systems and procedures that have been in place for years, and even if they are aware of the importance of environment and sustainability, it is not an issue at the top or very high in their priority list. The staff is this scenarios' main target audience, whose behavior the Company Owners

wish to positively influence, as they are actually responsible for putting any plan into action and applying the practices directed by the leadership team.

Case Flow

First, the facilitator/trainer introduces the case, then describes the [key contextual details](#) of the scenario and provides detailed information of the roles/characters to be played.

The scenario's business represented by its owners initiates the role-playing by shortly explaining their strategic plan for their GREEN Project meeting presentation to the staff representative, where an external Environmental Consultancy expert/professional has been invited along with the Local Community Representative. This group attempts to negotiate with other actors/groups, supporting the business interests. The rest delegates (i.e., the staff representative, the Environmental expert and the local community representative) engage in role-playing by the same token. All participants are allowed to advise their group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary. Specific questions are asked to each group/delegate, so as to facilitate the discussion and the first phase of negotiations that will lead faster to the participants' final decisions about the scenario. Such questions are:

- [for business owners]

Is it possible to measure, monitor and manage the business carbon emissions? How can we assess the monetary or any indirect benefits of turning to cleaner energy and investing in the GHG management and energy savings? What technologies can be used? How innovative can we be? Which are the fixed and variable costs of our company? How much will it cost if we proceed to the changes proposed and will it support our operations or bring additional risks instead? What costs are going to be reduced? How will this practice increase our competitive advantage? What are the corporate values regarding sustainability? How can we evaluate our current CSR and green strategy? What are the benefits of having a green-oriented CSR strategy? What should be included in the environmental aspect of our CSR strategy to increase our green image? Is there any skills deficit within our staff about following the GREEN Project and altering our business practices? And if we have to upskill, what will be the cost and what will be the benefits? How can we involve the staff in the creation of a common strategy for energy saving and waste reduction? How can we determine if the staff would support such a move or change? How to provide the right information to stakeholders?

- [for the environmental expert]

Is it possible to measure, monitor and manage the business carbon/GHG emissions? At what cost can this be implemented? Are there incentives suggested to the regional business that encourage its investment on cleaner energy, GHG management and energy savings? Are there any public funding schemes/options that could help some of the proposed actions? Can we highlight the benefits of the sustainable transition and motivate the business owners (management) to consider this approach, including the avoidance of penalties?

- [for the local community representative]

What actions need to be done to ensure that the regional environment and natural world are protected? How to increase pressure on local authorities to act against violations of regional businesses (penalty-fines) in terms of emissions and waste that causes environmental issues? Are there any official reports by the business to provide adequate information to stakeholders describing

in detail the impacts of its activities on the environment and climate change? How to interpret such information and evaluate the corporate green image?

- [for the company staff]

Which sustainable actions can be followed in our everyday professional lives to reduce energy consumption and waste production? Is it possible to maintain these actions over a long period of time? Are we really and practically unsustainable if things stay as they are? What is the impact we are having on the environment? What are the incentives to change and move away from the status quo? Are there any other initiatives that we could take on to be more environmentally sustainable? Which actions should be done to ensure that the staff will follow and internalize/adopt these practices?

The above questions are useful as a guide/support/reflection for the simulation training and they do not need to be explicitly answered by the participants.

Towards the conclusion of the role-play (and surely after the discussion/negotiations have proceeded well and have reached at a satisfying level close to what was initially anticipated), the actors/participants will be asked to conclude by deciding for one of the following three options. Each delegation should opt for:

- Acceptance of all the final resolutions suggested – for instance: decide to Install solar PV panels to gradually substitute fossil fuels with electricity, acquire electric vehicles and a low consumption tractor, establish new eco-packs for all products, apply environmental training for the staff, adopt a green policy (recycle, reduce, reuse, energy efficiency), introduce the Green Staff Award competition, improve efficiency in packaging and transport, switch to new local suppliers and/or inform current ones about the benefits of applying green practices.
- Amendment of the suggested resolutions and qualify the most suitable strategic actions among the GREEN Project proposal items.
- Rejection of the suggested resolutions - extreme scenario ending with total disagreement among all the parties/delegations involved.

The Lesson Plan of the 4th scenario follows right after, while in [Annexes](#) there are also the respective:

- [Trainees' Handouts](#),
- [Activity Sheet](#),
- [Role Cards](#),
- [Question Sheets for Roles](#),
- [Individual Performance Evaluation Sheet](#),
- [Extended Information Sheet](#).

Lesson plan

Steps	Timing	Equipment	Material	Advice/Tips for the facilitator	Further Reading/ Link to Resources
Introduction [1] Welcome participants [2] Brief introduction to the topic [3] Warm up activity The correct answers are: 1 – F, 2 – C, 3 – D, 4 – A, 5 – B, 6 – C	15 minutes	<ul style="list-style-type: none"> In-person event: A quiet lecture room needs to be set up. Online event: An online platform offering a “breakout room” feature (e.g., Zoom Meetings). 	Warm up activity sheet	This stage has to be short in time and is expected to take up to 15 minutes. Start arranging the classroom.	Timing
Briefing [1] Background knowledge information Ask questions to identify the knowledge capacity and the level of awareness that trainees have about their company’s use of energy, waste production, GHG emissions, CSR strategy and green image, competitive advantage, reduced costs, opportunities for training staff, fines and penalties due to the carbon footprint, stakeholders informing, innovation of green products and services, energy saving policies, etc. Such questions can be: <ul style="list-style-type: none"> Which specific everyday activities conducted within your company relate to climate change? Which of those activities refer specifically to efficient use of energy and waste production? How can people in your company learn how to use energy effectively and reduce waste production? 	15 minutes	Use the same equipment as in the previous step.		Tips for Briefing	Background knowledge It can be found at the simulation scenario 4 (ANNEX I) section: “Background” p.4 Key contextual details

<ul style="list-style-type: none"> • Are you aware of the term Corporate Social Responsibility and some potential benefits that it may have both for the business itself and the environment? • Does your business estimate its carbon footprint? • What technology apps does your business use to reduce GHG emissions production? • Does your business provide information to its important stakeholders about the level of climate change impact of its activities? • What does the carbon footprint as a process of quantifying refer to? • Have you ever come across a case of another business that received a penalty or fine due to environmental pollution or a relative issue caused by its activities? • Can you name some sustainable practices that your business could take to reduce their emissions and become more sustainable? • What may hinder your business from going green? • What would it take to initiate, form, maintain and manage a green organizational policy? <p>These questions are useful as a guide for the simulation training, but they do not need to be explicitly answered.</p> <p>[2] Briefing of the theme Describe key themes and contextual details of the scenario:</p> <ul style="list-style-type: none"> – Measure and reduce GHG emissions – Reduce costs by saving energy policies - technology applications 					
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<ul style="list-style-type: none"> – Reduce costs by training the staff on how to use efficiently energy – Raise awareness of energy consumption and waste production – Avoid penalty-fines – Increase corporate green image – Improve competitive advantage - first mover advantage – Encourage innovation of new green products and services – Provide stakeholders information 					
<p>Preparation for the role-play</p> <p>[1] Introduction to the role-play simulation and goals</p> <ul style="list-style-type: none"> – Provide the handout to trainees and introduce the scenario case – Decide or ask from trainees to form 4 groups of 3 (or more) participants each, corresponding to the scenario roles – Explain the procedure to trainees <p>[2] Roles' assignments to the groups</p> <p>Provide detailed information for the 4 roles to be played in the scenario. You may give the appropriate Role Card to each group:</p> <ul style="list-style-type: none"> – Business owners – Environmental expert – Regional association representative – Staff representative <p>c) Explain to participants what their tasks are as delegates.</p> <p>At this point it will be helpful to distribute the Question Sheet for each role to the respective group and provide a few minutes for</p>	20 minutes	<ul style="list-style-type: none"> ● In-person event: <ul style="list-style-type: none"> - Stationery (pens, paper, envelopes, folders, etc.) ● Role-play online: <ul style="list-style-type: none"> An online platform offering a “breakout room” feature (e.g., Zoom Meetings). 	Trainees' handout Role Cards Question Sheets for each role Additional information that helps trainees in their decisions	Tips for Briefing	Describing roles – characters of the simulation Number of participants and Groups

<p>participants to reply. They will need to propose ways for GHG emissions reduction, energy efficiency, CSR initiatives and green policies, staff training, innovative products and services, technology applications, land use changes and climate finance pledges. It is not required from trainees to provide an extensive reply for each question, but rather take notes so as to better support their arguments later on.</p> <p>[3] Breakdown of role-play simulation into specific tasks & time constraints</p> <p>Explain the process of how to start negotiating, propose actions and come up with a solution that serves their group's interests at most.</p>					
<p>Simulation flow</p> <p>[1] Initiate the scenario Ask the "Business owners" group/delegate to initiate the role-play, supporting the business interests.</p> <p>[2] Actual role-play, simulation activity Invite the rest groups and delegates (environmental expert, regional association representative, staff representative) to engage in the role-play by the same token.</p> <p>[3] Presentation by the delegates of their group's proposals Ask all the 4 groups to present their proposals keeping the same order that they initiated the role-play, so that they have enough time to</p>	60 minutes	<ul style="list-style-type: none"> ● In-person event: <ul style="list-style-type: none"> - Projector - Main computer - Sound/audio equipment (speaker, microphone, etc.) - Tables and chairs ● Role-play online: <ul style="list-style-type: none"> - Laptops - Headphones - Compatible hardware devices 	Additional information that helps trainees in their decisions	<p>Tips for the role-play</p> <p>20 minutes may be invested for the presentation of the proposals by the delegates, which correspond to 5 minutes per group.</p> <p>The remaining time (40 minutes) may be invested in discussion and negotiations between groups and delegates.</p>	<p>Scenario Script</p> <p>Case Flow</p>

<p>better prepare their proposal and argumentation.</p> <p>[4] Negotiation stage (multiple phases) Allow more rounds if necessary. Delegates (groups) may engage in multiple rounds of negotiations. When the first round has been completed, a concern can be set to participants, to help the transition to the next rounds of negotiations: "Each choice comes with a cost, along with its benefits. Try to consider and express in brief your thoughts about your proposal, regarding its consequences, costs or expenditures along with the time required to be set in practice."</p> <p>[5] Agreement reaching Finalize negotiations by making a decision or establishing a final solution approved by all delegates (groups). Ask the actors to conclude by deciding for 1 of the following 3 options. Each delegation should opt for:</p> <p>→ Acceptance of all final resolutions suggested - total greening of business that entails: Installing solar PV panels to gradually substitute fossil fuels with electricity. Acquiring electric vehicles and a low consumption tractor. Establishing new eco-packs for all products. Applying environmental training for the staff. Adopting green policy (reduce, reuse, recycle, energy efficiency). Introducing the Green Staff Award competition. Improving efficiency in packaging and transport. Switching to local suppliers and/or</p>					
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<p>informing current ones about the benefits of applying green practices.</p> <p>→ Amendment of the suggested solutions and qualify the most suitable strategic actions among the GREEN Project proposal items.</p> <p>→ Rejection of suggested solutions at an extreme scenario ending with total disagreement among the groups and delegates involved.</p>					
<p>Summarizing the role-play</p> <p>[1] Summary of the role-play and final decisions made.</p> <p>Towards the conclusion of the role-play and surely after the discussions and negotiations have proceeded well and have reached at a satisfying level close to what had been initially expected, a summary of the role-play is necessary. Present all the proposals and crucial decisions made by the groups at each round of negotiations. Describe in brief the final agreement or the solutions decided at the role-play.</p>	5 minutes	A board will be helpful to sum up the key points of the role-play.		Sum up the final decisions made by the groups at each round of the negotiations, trying to pique interest and generate questions that will facilitate moving on to the next stage.	Timing
<p>Debriefing</p> <p>[1] Debrief Coordination</p> <p>Gain insight into the decisions made and behaviors displayed during the role-play.</p> <p>[2] Discussion</p> <p>Ask everyone to step out of their roles and reflect on the experience through focusing on the feelings, hope and call to action. Try to engage trainees in the discussion to encourage them to reflect on the experience and draw out insights from it.</p>	75 minutes	<ul style="list-style-type: none"> ● In-person event: <ul style="list-style-type: none"> - Stationery (pens, paper, envelopes, folders, etc.) ● Role-play online: <ul style="list-style-type: none"> The online platform used already in previous steps (e.g., Zoom Meetings). 	Results' sheet	Tips for Debriefing	

<p>Based on the feedback received from the debrief discussion, you may elaborate on learning tasks, clarify misunderstandings, or make adjustments for future role-plays. You can facilitate the debriefing discussion by asking questions such as:</p> <ul style="list-style-type: none"> – How do you feel about your results? How do you come across any difficulties (or ease/possibility) to achieve them? – To what extent did your proposals produce the result you expected, or hoped for? Why or why not? – What impact do you envision the result you achieved will have on the interests you were representing? – To what extent is the result you achieved feasible? From an economic standpoint? A political standpoint? A social/technical/cultural standpoint? <p>[3] Reflection</p> <p>Acknowledge the overall emotional involvement of participants, whose self-reflection can be integrated throughout the role-play and after each stage. In this way, you can have a far better and more rounded picture of how the activity has been developed.</p> <p>Participants need to think about answers on specific questions. To find and pose the right questions, you must consider what is important to be discussed after the role-play. Examples for questions to ask are:</p> <ul style="list-style-type: none"> – How did the attitudes affect you? – What do you think you did well? 					
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<ul style="list-style-type: none"> - What do you think you might have done differently? - What is one thing you have learnt today that you will take into your business practice? 					
Post assessment [1] Evaluation of participants' performance Ask the participants to assess their performance through a questionnaire, which entails queries related to the learning outcomes. [2] Evaluation of the role-play simulation Ask the participants to fill in the relevant questionnaire.	10 minutes	No additional equipment required.	Questionnaire c) Scenario 4 questionnaire for individual performance evaluation d) Role-play Simulation questionnaire	The evaluation activity entails the completion of 2 separate questionnaires by the participants. Explain to participants why this activity is important. Make clear to them that the questionnaires are anonymous and should be completed individually, without any third-party intervention. There are no right or wrong answers, and they should reply as frankly as possible based on their individual opinion.-	
Closing simulation Close the simulation by thanking all participants and any audience or sponsors, calling for brief applause.	–	No additional equipment required.		Participants are allowed to leave the event	

7. Facilitation of the Role-playing Simulation Training

Tips for Briefing

The briefs for all participants of the role-playing should be unambiguous and totally in line with the objectives. You must use a clear introduction informing participants about the purpose of the game, the goals, and your own (and/or program-based) motives and situational definitions.

At this stage, you provide first an informal introductory presentation and the background knowledge information on climate change that needs to be reviewed for the simulation, along with key themes and contextual details of the scenario. Be well-prepared by taking into account as many aspects of the theme as possible and focus on what is expected from trainees. You act as facilitator of the role-playing, introducing the game play and the simulation model, before officially opening the role-playing action. It is worthwhile, before starting, to create a trusting and open atmosphere among participants (supported by suitable warm-up exercises and team-building exercises) and to explain the voluntary nature of participation as a challenge by choice. Adequate time has to be provided to the trainees to read the scenario case, get familiar with their roles and ask questions. It is important that everyone feels comfortable while forming the groups and before the role-playing action. Some may experience this kind of learning for the first time, thus, tips and/or examples are useful to be provided.

Tips for actual Role-Play

Take on the role of observer and interject only if and whenever necessary. Despite being present, you will have no active role in the play. Let the simulation flow with each new pledge added. Invest time to hear proposal speeches from each delegate and monitor the simulation scenario run. Try to remain silent, minimize your advocacy and let the role-play do its work. Set enough time and space for the delegates (groups) to negotiate. Allow them to be engaged in multiple rounds of negotiations, so as to achieve objectives and reach a breakthrough agreement or solution (ideally by consensus). You may allow participants to have the floor and advise their group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary. Your task is to set up actors to learn through the role-play, stretch themselves personally and engage as much as possible. Usually, someone steps forward and finds that voice inside themselves to advocate for improvements. A degree of independent learning is expected, but trainees need to be guided during the activity. You have to facilitate, rather than lecture with too much detail. It is important to remind them of the rules, so that they stay in their roles and/or use appropriate communication skills.

Tips for Debriefing

When the negotiations have been concluded and the final decisions have been made by the actors, the debriefing discussion takes place. It is the most important stage of the simulation and it may take more time than the actual play (even twice as that). Because simulations provide the opportunity to give immediate feedback, coaching, support and developmental guidance, the proper debriefing of them is paramount to the transfer of learning. When doing so incorrectly or inconsistently can be damaging to the individual and impact the integrity of the simulation experience. Willingness to

support and dedication to intentional skill building are required to effectively facilitate simulations and conduct the debrief for participants (Goulet, Cross, Chiu & Evans, 2021).

To save time during debrief, you may pose questions that apply to all (e.g., “Please raise hands, or write in the platform’s chat box, or vote at the poll created, if you think that it was an intense experience / if you feel that you played a role you have never played before, one that is perhaps quite different from your actual role in the world.”). In this case, wait for hands, or texting in the chat box, or votes by everyone. Another idea is to invite learners to take 1 minute of silence to reflect on future possibilities (e.g., “When we talk about future regarding climate change impacts, we spend most of the time focused on how bad the worst-case future looks, or how difficult adaptation will be. Instead, I’d like you to consider silently for a minute the possibility for the business of this scenario to contribute to some extent to the creation of a better future.”). This is important because it brings increasing hope to learners, who are preparing themselves to find resolve, a vision of a better future, and commitment to act about it. Then the trainer can follow up with another prompt, such as “Think of something you would love about being part of this sort of future.”.

The evaluation activity is also part of the debriefing. You should encourage your participants to reflect on the activity and identify their strengths and areas for growth. This entails the completion of 2 separate questionnaires by the participants (an individual performance evaluation sheet and a simulation training evaluation sheet). You should explain to participants why this activity is important and make clear to them that the questionnaires are anonymous and must be completed individually, without any third-party intervention. You should highlight that there are no right or wrong answers, and they should reply as frankly as possible based on their individual opinion. This process will allow trainees to practice giving and receiving feedback and begins to teach the practice of peer-to-peer support and coaching.

Environment settings

Role-playing in class

For an in-person event, a quiet lecture room could be set up. While open space is also an option, it entails some risk in terms of distractions that may appear (weather conditions, environmental noise, difficulty of preparing and running the simulation role-play without the proper/special equipment required, etc.).

Role-playing online

For an online event, you can choose an online platform that you access to and are familiar with. However, the latter is needed for the actors as well, since it constitutes a determinant for the success of the role-playing. Also, you should take into consideration that an on-line event entails some minor risk in terms of distractions that may appear due to potential net disconnections or incompatible devices used by the participants, such as headphones and/or any other hardware that may consume time and force the simulation training to fall behind schedule. It is important that the online platform selected in the simulation offers the “breakout room” feature, so that delegates can decide privately within their own groups the argumentation and strategy to follow during negotiations.

Staff involved

Apart from learners/participants that will be the **actors** to perform the simulation scenario's roles, representing the delegates of the scenario, a technical expert might also be available to ensure the smooth carrying out of the play.

Particularly, you as the **trainer** will be present to coordinate the simulation. Among your tasks is to listen closely to all of the actors' speeches, demonstrating the sort of focus that you want others to employ. Amidst all the rhetoric, you note the specific actions that are being proposed and clarify whenever needed. Within your tasks is also to call on the group's representatives and allocate time appropriately for the short presentation of their proposals. The order of teams you call on does not matter significantly, but calling on the main character (i.e., the business owners) first will help the case flow. You also have the task to project a timer that all of the actors will be able to watch, so as to show that they will be cut off if they run over time. In addition, you should allow actors for only minimal additional rhetoric about the difficulty of the situation. You provide further explanations of what it would take for the delegates to reduce GHGs and waste production, use energy efficiently, mitigate climate change impacts of the business operations, promote the staff's training for green actions aligned with reduction of costs and improve CSR. To accomplish all the above, you should act as a facilitator, so you must be profoundly acquainted with each scenario, its case flow, the roles and characters, the personalities participating in each of the groups, the specific simulation parts and certainly the exact time schedule so as not to deviate from that. Optionally, a **technical expert** can provide support to you if you are not well acquainted with arranging and preparing all necessary adjustments for the on-line platform to host the simulation. The expert may also be available to provide relevant support whenever needed during the role-playing.

Equipment, Tools, Resources

Role-playing in class

For an in-person event, the room where the simulation role-playing is going to take place, should be set up with the proper equipment, tools and resources as described below:

- A projector and a main computer with access to the GoGreen training material. It is possible that a supportive lecture and/or presentation through slides will accompany the role-playing.
- Attention to technical details. For instance, the image projected should be large enough and positioned appropriately, so that all participants can see it clearly.
- The sound, audio, talking and any possible environmental noise need to be considered, providing the necessary equipment such as a microphone and/or a speaker.
- Writing materials and stationery required, including pens, paper, envelopes, and folders. Also, providing laptops for the participants - one per group/delegate - is optional.
- Chairs and tables for the groups to discuss and negotiate during the simulation role-playing. Each table should have table tent name-tags with the group's name, along with the handouts distributed for the participants. Also suggested is to include whatever will make actors feel their roles more authentic and the role-playing simulation more engaging.

Role-playing online

For an online event, the equipment, software, tools and resources required are described below:

- Computer or laptop, along with a camera and a headset with microphone for every participant and the trainer.
- Audio and video available for both you and the participants, who need to set up the virtual meeting preferences beforehand.
- Zoom Meetings online platform. It works well for our scenario to offer access in the simulation for all participants. The selected platform allows for a “breakout room” feature as well. Participants need to be/get familiar with the controls and features of the virtual meeting software. You have to make sure beforehand that they know where any important controls are (e.g., chat boxes, muting/unmuting participants, virtual background controls, etc.). If participants are using the Zoom Meetings platform for the first time and are unfamiliar with its software, they will be supported by a technical expert (if needed) that can add supplemental slides to the slide deck in order to orient them to the webinar mechanics at the beginning of the event. Also, each participant should have a nametag with the group’s name alongside to avoid confusing roles during the play.
- A handout in digital format (PDF file) is going to be distributed among participants which includes a detailed description of the situation, groups and key characteristics of each delegate, so as to ensure the proper case flow. Additionally, the handout can entail whatever you consider that facilitates the role-playing and makes the simulation more authentic and engaging for learners. Also, it is recommended to include the key contextual details of the scenario, so that all participants have a more rounded view about the particular areas/topics that are going to be addressed during the training.

Evaluation of the Simulation Training

The simulation training should be evaluated after the completion of the role-playing. For this purpose, a [questionnaire](#) has been developed and should be distributed to all participants. They are asked to answer the following questions using a 7-point Likert scale (from “1=Not at all” to “7=To a great extent”):

- Has the scenario been aligned with the objectives?
- To what extent the simulation has been appropriately challenging?
- Did the role-playing meet the intended purpose?
- Did the participants require “life savers” or additional challenges during the role-playing?
- Were there aspects of the scenario’s authenticity that affected the participants’ engagement?
- Were there times during the scenario that your own opinion of the matter shaped your argument? Did you fully commit to the role or did your own beliefs get in the way?
- Has there been a divide in your own business like the one in the scenario?

ANNEXES

Scenario 1

Trainees' Handout

Title of the simulation activity	Business as Usual Scenario (No change at business policy)
Duration	165 - 180 Minutes
Summary/overview	<p>Companies have a critical role to play in the climate change challenge, which renders them across the globe, especially small and medium-sized enterprises (SMEs), responsible for taking action. While SMEs have started responding to climate change, they still lack the necessary skills or competencies to set appropriate targets and act in the right direction. More training is needed for them to develop their skills, along with some guidance that will contribute to setting robust and credible targets in line with the climate change conditions.</p> <p>Here, we examine some of the reasons why European companies and especially SMEs have not yet embraced a green agenda and are happy to maintain the status quo with no change at their current business policy or strategy. We will explore the current realities facing companies acknowledging that businesses are often fearful of the unknown and the risks of transitioning to a new green strategy. This can put a halt to embracing more 'green' policies and actions as a part of their business operations and allow business practices harmful to the environment to continue.</p> <p>Based upon these realities, there is a need for greater level of information and training to debunk the belief that transiting to greener business practices is costly and risky, whilst highlighting that inaction continues to impact negatively on the environment through higher greenhouse gas (GHG) emissions. Not going green and maintaining the status quo can present missed opportunities for companies to, in fact reduce costs, eliminate the likelihood of facing fines and penalties for negative business practices i.e., pollution, etc. and reverse their poor public corporate image as a company that does not care about the environment and overlooks the CSR potential benefits in the long term.</p> <p>The training proposed by this role-playing scenario will highlight at first the risks that companies might face if they are not acquainted with the link between high GHG emissions and climate change, the related penalty and fines that they might receive from Local, National and EU authorities if they do not lower their GHG emission levels. Secondly, the scenario will explore the link between the green practices and the cost reductions for the company; finally, it will be shown how the lack of CSR can result in a poor company image.</p> <p>GoGreen offers you the opportunity to participate in a simulation-based training workshop in the form of role-playing which will help you better understand the climate change impacts, as well as to get more knowledge about actions that enterprises take to reduce these impacts, understand your role as entrepreneur in this process and the positive implications of such actions for your business.</p>

	<p>Your participation in the role-playing simulation workshop will allow you to explore realistic situations by interacting with others in a managed way in order to develop experience and try different strategies in a supported environment. You might be playing a role similar to your own (or likely one that you will perform in the future), or you could play a different one but part of the conversation or interaction that is developed around the business environment. Both options provide the possibility of significant learning, with the former allowing valuable experience to be gained and the latter encouraging you to develop a better understanding of the situation from another point of view. In any case, through the structured role-playing, you will get exposed to different sets of opinions and come across multiple perspectives to consider within a challenging environment.</p>
Learning objectives	<p>The main objective of this role-play simulation workshop is to help you to:</p> <p><u>Increase your understanding</u> on the following areas:</p> <ul style="list-style-type: none"> - missed opportunities for organizational cost reduction - business policy change and green business strategies - corporate green image and CSR - risks of penalty-fines due to increased GHG emissions - missed opportunities to improve CSR of your company through actions related to GHG emissions and waste management <p>and</p> <p><u>Develop your key interpersonal competencies and skills</u> such as:</p> <ul style="list-style-type: none"> - Critical thinking - Problem-solving based on real-life scenarios - Negotiation skills - Collaboration - Judgment and decision-making
Scenario	<p>The Company decides to make no change at business policy</p> <p>The hypothetical medium-sized accountancy company has been working for over 20 years in the accountancy sector in Europe with 10 employees. We have a diverse range of clients across many agricultural, manufacturing and services sectors and the size of our customers range from sole-traders (self-employed individuals) to family-run businesses. We provide the following services: secretarial services, bookkeeping services, management accounting, financial statements for all legal entities, advisory, consultation and due diligence, tax related services, and payroll.</p> <p>The company has grown significantly over the past 10 years in terms of staff headcount from 10 employees to more than 100, turnover and client numbers. The company provides reliable, cost-effective solutions and up until recently had a good reputation in the business community regarding the quality of the services provided, but it is now becoming a low-tech operator and has not embraced technology or sustainability practices like many of its competitors and this is beginning to impact on customer retention and attracting new business. The company's reputation is declining along with its CSR profile.</p> <p>Even though the accountancy company has heard of the imminent climate crisis, the EU Green Deal, COP26 event and all related activities set at National and EU level, but it has prioritized other business strategies such as growth and has not focused its attention on the impact its activities are having on the environment</p>

	<p>or climate change. Therefore, the company has no sustainability plans in place and has not yet begun moving towards a green business model.</p> <p>In fact, the company business practice is heavily reliant on paper, employees use paper to record every client engagement and transaction. Notes are taken, documents prepared, and memos generated – all printed and filed away! We are excellent record keepers and large consumers of paper and paper products. The company’s lack of investment in ICT and e-conferencing facilities has resulted in all client consultation taking place face-to-face with spiraling travel and meeting costs being faced by the company as they have grown. The company’s carbon footprint is estimated to be high.</p>
Your tasks	<p>The Simulation involves your placing in particular roles according to the scenario that you have to act out. Three main roles are entailed in the current scenario:</p> <ul style="list-style-type: none"> [1] Business owners, [2] Office manager [3] Environmental Officer <p>In the current scenario, the three (3) roles (Business owner, the Office Manager and the Environmental Officer) are planned to be represented by groups of 3 (or more) participants, who will argue for their interests, but they will speak out as a single delegate. You may have the floor and advise your group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary.</p> <p>All delegates are aware of the climate change issue and its impact but for different reasons. Some will have strong opinions of environmental protection and emissions reduction actions, whilst others will have limited knowledge and motivation for action and will be more concerned about the potential loss of revenue and the worsening of their interest by taking no actions against climate change.</p> <p>Even though the emotional environment for the three role players is not necessarily confrontational or particularly divisive, it is a discussion with competing points of view that reveals the missing opportunities and the pros and cons of the current situation within the company. In the end, without common agreement, the company management (i.e., the business owner) sees no reason to change and maintains the status quo, or alternatively acknowledges the benefits and opportunities that are missed if keep using that amount of paper, produce too much waste and not include a change of the business policy in its plans going forward.</p>

Warm up Activity Sheet

1) TRUE or FALSE

Please divide into groups of 3 and try to answer the following questions in turns:

- a) Burning fossil fuels, in combination with destruction of carbon sinks due to deforestation and other activities, has contributed to more and more carbon dioxide building up in the atmosphere. **True or False**

- b) Trees and other plants do not absorb carbon dioxide from the atmosphere as they grow. **True or False**
- c) The fossil fuels are pumping much more carbon dioxide into the atmosphere than existing forests can absorb. **True or False**
- d) Droughts, tropical storms, heatwaves, and fire weather are decreasing in severity and frequency because of climate change. **True or False**
- e) Protecting natural ecosystems and re-establishing forests are unnecessary attempts to draw down carbon dioxide from the atmosphere. **True or False**

2) WHAT DO YOU KNOW ABOUT DEFORESTATION?

Please divide into groups of 3 and think about as many keywords as you know connected to the topic of deforestation. Explain your choices. One point will be given for each correct keyword.

Please write down here the selected keywords.

1. Keyword: _____
2. Keyword: _____
3. Keyword: _____
4. Keyword: _____
5. Keyword: _____

6. Keyword: _____
7. Keyword: _____
8. Keyword: _____
9. Keyword: _____
10. Keyword: _____

Role Cards

Role [1]: The Business Owner (CEO)

Description

The Business Owner character is not sufficiently informed about the environment or environmental practices at present and therefore not motivated to change. The Business Owner believes that using paper is essential and critical to their operations and does not recognize the damaging environmental impact the company's outdated practices are having on climate change, the company's poor reputation in terms of sustainability and environmental awareness. From a compliance and regulatory point of view, the CEO does not trust technology sufficiently well to consider moving to a paperless office and is even resistant to introducing recycling policies in the company. The Business Owner is also very happy with how things are and currently working, systems that have been in place for years and thinks the move to paperless offices is just the latest in a long line of inane trends and is not willing to change but would rather maintain the status quo.

Role [2]: The Officer Manager

Description

The Office Manager is an informed character that believes using paper is fundamentally wrong, damaging to the environment and not necessary at a time when technology, security systems and computer applications provide a viable alternative that has a reduced environment footprint. Not only is a move toward a paperless office more cost effective, but it also saves time and offers more efficient work practices and makes a positive environmental contribution. Also, the Office Manager is familiar with the business actions already taking place in other companies and their competitors. Perhaps he agrees that a change in business policy will be a positive step for the company, but he also must support the business owner and might not be willing to take the risk of changing. He may agree to keep business as usual, even though he also understands the missed opportunities, acknowledges the bad marketing image of the company amongst the customers and the community and the recommendations and pressure applied by the environmental officer.

Role [3]: The Environmental Officer

Description

The Environmental Officer is employed by the Local Authority to enforce the waste management plan for the region (impose fines and penalties) but also work with the business community and companies to inform them of their responsibilities, incentivize them to make positive environment changes and highlight the good practices that are taking place at regional level (marketing and supporting CSR). He/she can also refer to that others (competitors/partners/suppliers) have started to act and change their policy or consider the increased green expectations of their clients (or the community).

Question Sheets for Roles

Questions for Role [1]: The Business Owner

- Why is it necessary to implement changes within the business?

- How can we determine if the staff would support such a move or change?

- How much is it likely to cost to make the changes proposed and will it support our operations or bring additional risks?

- Is the technology reliable enough to replace the use of paper, what will be the risks, what will be the cost to train our staff?

- How can we explain the reasons why paper is fundamental to our business?

- What impact are we having on the environment?

Questions for Role [2]: The Office Manager

- Which sustainable green actions can be followed in our everyday working tasks to reduce paper consumption and waste?

-
- Can we provide solutions to the key clients online that demonstrate our ability to respond to the climate crisis and still offer an excellent service?
-
-

- Can we highlight the benefits of this move at cost and marketing image level and motivate the business owner and team to consider this approach?
-
-

Questions for Role [3]: The Environmental Officer

- What are the penalties and fines for not going green, keeping business as usual and continuing to use plenty of paper?
-
-

- Can we form a list with the negative impact that people from the company are having on the environment by doing nothing?
-
-

- Are there other initiatives that they could take to be more environmentally sustainable?
-
-

- Is there an appetite or motivation amongst this company to embrace change?
-
-

- What are the incentives to change and move away from the status quo?

-
-
- How damaging is doing nothing having on their external public image – what feedback can I offer as an external expert in the sector?
-
-

Individual Performance Evaluation Sheet

Questionnaire for Participants' Performance

Through the GoGreen role-playing simulation, you have been exposed to a range of climate change actions and ideas that you should be able to adapt in your own business context.

The following questions aim to assess whether and to what extent the learning objectives and outcomes of the training have been achieved. Please, answer using a 7-point Likert scale (from "1=Not at all" to "7=To a great extent").

Do you feel that through undergoing the current simulation training, you:

- acknowledge the impact on company's businesses when not adopting green business strategies?

1 2 3 4 5 6 7

- are acquainted with the effect of high GHG emissions on climate?

1 2 3 4 5 6 7

- are acquainted with the connection between lack of CSR and bad company image?

1 2 3 4 5 6 7

- know to outline how green practices and cost reduction are related?

1 2 3 4 5 6 7

- are able to analyse the loss of not adopting a green strategy in terms of cost reductions?

1 2 3 4 5 6 7

- are able to assess the risk of penalties or fines to be imposed due to high GHG emissions?

1 2 3 4 5 6 7

- are able to measure the implications of CSR inactivity and the impact on the company's marketing image?

1 2 3 4 5 6 7

- are in the position of thinking critically about the role of companies in climate change?

1 2 3 4 5 6 7

- are in the position of appreciating the viewpoint of other stakeholders influenced by climate change impacts and the regulators of green policies?

1 2 3 4 5 6 7

Extended Information Sheet

Informative videos about the climate change and global warming

<https://www.nationalgeographic.org/video/climate-101-cause-and-effect/>

https://climate.nasa.gov/climate_resources/139/video-global-warming-from-1880-to-2020/

<https://youtu.be/8Rvl6z80baI>

How are costs linked to corporate strategy?

- The main aim of a company is to maximize wealth. To do this, companies are strategically minded and emphasize long-term growth.
- To grow a business, organizations must ensure that they reduce their costs where possible to increase their profits.
- To do this, all stakeholders within an organization need to be mindful of implementing cost reduction strategies at all times, especially in the early days of product or service development.
- Failure to consider costs at all stages of the product/service lifecycle could result in the product or service becoming too costly to roll-out, and causing cash flow and liquidity issues for the organization.



What opportunities are available to an organization to significantly reduce their costs?

There are many different strategies and opportunities available to support an organization to reduce the costs associated with their products and services, including:

1. Cost Reduction by Design
2. Reducing overhead costs
3. Lean manufacturing and production opportunities
4. Implementing standardization policies
5. Economies of scale



Opportunities available to an organization to significantly reduce their cost

Cost Reduction by Design

- The creation and design stage of any product is the best opportunity for an organization to identify any cost cutting measures that can be implemented. Eco-design principles allow companies to design out waste thus reducing costs.
- Once the product has been designed, it is very challenging for organizations to reduce the costs associated with its creation.
- At this stage, one change may impact on other items – for a manufacturing company creating tables, by using cheaper wood, the nails or glue used to hold the wood together may not work in this cheaper raw material.
- It is important to consider the ecological impact of decision making at this stage, because although these changes may not be visible, there could be significant damage occurring to nature and the environment.



Reducing overhead costs

- Overhead costs are on-going business expenses that, although not directly associated with the creation of a product or a service, still apply a cost to the final product.
- Commonly paid overhead costs that a company pays include: rent; utilities; insurance; and office equipment.
- As overheads can fluctuate in price, it is important for organizations to be continuously mindful of the long-term knock-on impact these costs can have on the company's ability to make money.
- To help to reduce overhead costs, why not consider:
 - ✓ Leasing office buildings, co-working spaces or office equipment rather than owning them;
 - ✓ Hire staff on a freelancing basis if they are not directly involved in the creation of the product or service;
 - ✓ Offer employees the opportunity to work remotely to reduce the utility bills of the physical office;
 - ✓ Swap from diesel vehicles to hybrid cars;
 - ✓ Making a policy within the office to disallow staff from using paper resources.
 - ✓ Implement reuse and recycle measures

Lean manufacturing and production opportunities

- Lean manufacturing, or Just-in-Time manufacturing, is a philosophy that enables a company to 'do more with more and less with less' (Source: Simon and Schuster, 1996).
- Lean promotes sustainability, always delivering value to the customer.
- As people are the most valuable tools that a company has, lean supports organizations to maximize customer value while minimizing waste.
- Lean supports businesses to provide high quality, low cost and short lead times.

Implementing Standardization Policies

- Organizations that offer standardized products and services can reap cost saving rewards through maintaining certain levels of consistency in the product offering.
- Often seen with products and services offered by franchises, standardization provides a basis for the benchmarking of quality and uniformity.
- Standardization can be completed on a local, national or global level, through a wide range of measures, including;
 - ✓ Ensuring all technology that is manufactured has the same inputs such as phone chargers, plug socket and USB ports;
 - ✓ Ensuring that all food and beverage products taste the same, irrespective of the kitchen used to create the products.



Economies of Scale

- As production scales up and production becomes efficient, companies can reap cost savings through economies of scale.
- Often associated with larger companies, economies of scale enable organizations to reduce the cost of production by creating more products, as fixed costs can be spread out over more products.
- Bulk purchases, bulk creation of products and larger purchasing powers all support economies of scale.
- Economies of scale works well for organizations that have a standardized product offering, such as supermarket chains offering own-branded products.



Applications that can be used to support cost reduction

- To support organizations in identifying cost saving opportunities, a wide range of online websites and downloadable applications can be used.
- Some of the most frequently used tools include:

The Zero Waste App – <https://zerowasteapp.io/>

Waterprint – <https://waterprint.net/>



Scenario 2

Trainees' Handout

Title of the simulation activity	The Company decides to invest in GHG management – energy savings
Duration	2 - 3 hours
Summary/overview	<p>Companies have a critical role to play in the climate change challenge, which renders them across the globe, especially small and medium-sized enterprises (SMEs), responsible for taking action. While SMEs have started responding to climate change, they still lack the necessary skills or competencies to set appropriate targets and act in the right direction. More training is needed for them to develop their skills, along with some guidance that will contribute to setting robust and credible targets in line with the climate change conditions.</p> <p>Specifically, SMEs need guidance about:</p> <ul style="list-style-type: none"> – GHG measurement methods and procedures to reduce emissions – applying energy-saving practices – using green technology applications to reduce GHG emissions – the climate-related penalty fines and relative legislative frameworks – implementing sustainable practices such as energy, fuel and water efficiency, material reuse and conservation – build a solid corporate green image that contributes to an improved competitive advantage in the long term – informing their stakeholders about relative business practices <p>They also need appropriate trainings and upskilling, which along with a little bit of work, time, or money, could establish sustainable strategies that will:</p> <ul style="list-style-type: none"> – provide the required knowledge, skills and individual competences to understand the impacts of climate change – apply effective measures to mitigate such impacts – perform environment-friendlier practices and actions – reduce their environmental impact by reducing GHG emissions, saving energy, or decreasing waste – save money and help position the businesses for growth – initiate, form, maintain and manage green organizational policies <p>GoGreen offers you the opportunity to participate in a simulation-based training workshop in the form of role-play which will help you to better understand the climate change impacts as well as to get more knowledge about the actions that can be taken by the enterprises to reduce these impacts as well as understand your role as entrepreneur in this process and the positive implications of such actions for your business.</p> <p>Your participation in the role-play simulation workshop will allow you to explore realistic situations by interacting with other people in a managed way in order to develop experience and try different strategies in a supported environment. You might be playing a role similar to your own (or likely one that you will perform in the future), or you could play a different one but part of the conversation or interaction that is developed around the business environment. Both options provide the</p>

	<p>possibility of significant learning, with the former allowing valuable experience to be gained and the latter encouraging you to develop a better understanding of the situation from another point of view. In any case, through the structured role-play, you will get exposed to different sets of opinions and come across multiple perspectives to consider within a challenging environment.</p>
Learning objectives	<p>The main objective of this role-play simulation workshop is to help you to:</p> <p><u>Increase your understanding</u> on the following areas:</p> <ul style="list-style-type: none"> ▪ Measure and reduce GHG emissions ▪ Reduce costs by saving energy policies/ technology applications ▪ Increase Corporate Green Image ▪ Avoid penalty-fines ▪ Improve Competitive Advantage ▪ Provide Stakeholders information <p>and <u>develop your key interpersonal competencies and skills</u>, such as:</p> <ul style="list-style-type: none"> – Critical thinking – Problem-solving based on real-life scenarios – Negotiation skills – Collaboration – Judgment and decision-making
Scenario 2	<p><u>The Company decides to invest in GHG Management – Energy Savings.</u></p> <p>The hypothetical <u>business unit</u> is classified in <u>SMEs</u> and has been trading for over fifty years in the broader <u>agricultural</u> sector in Greece. It's business activity is twofold. It started out as a wine-making establishment (i.e., a winery), owning a big vineyard along with a small-scale bottling facility.</p> <p>Over the last few years, the company has extended its activity and engaged in the production and wholesale trade of olive oil as well, taking advantage of the 250 olive trees growing in its premises and an old building used as an olive mill (press) within its property that has been slightly renovated and set in function.</p> <p>The mean annual turnover of the business reaches approximately 550.000€. Its permanent staff consists of 15 people from various professional backgrounds and expertise (e.g., chemical engineer, agronomist, sales representative, machinery operators, crop workers, etc.) with appropriate tasks and duties. Seasonally, it hires extra manpower of 20-25 people during harvest periods.</p> <p>Following a recent alteration on the national business legislation framework for SMEs so that they adapt to the new situation of climate change and respective international trends, the company discerns that its GHG emissions and energy consumption are borderline legal. Hence, there is a high possibility in the near future to receive a financial penalty-fine for that. What is worse, the amount of waste produced by its activity has caused some environmental deterioration in the already fragile regional ecosystem, which has been noticed by some nearby residents, partner firms and local authorities</p> <p>Everything considered, the company decides to invest in GHG management and energy savings in order to mitigate the climate change impacts. There is a need to improve its environmental footprint, rectify potential negative effects, guard its reputation and image, retain a decent level of collaboration with its stakeholders, provide adequate information to them, and stay on course towards sustainability and growth.</p>

Your tasks	<p>The Simulation involves your placing in particular roles according to the scenario that you have to act out. Three main roles are entailed in the current scenario:</p> <ul style="list-style-type: none"> [1] Business owners, [2] Regional association [3] State representatives <p>Each of these groups is planned to be represented by one participant, who will argue for his/her group's interests, but he/she will speak out as a single delegate. All three delegates are concerned with the climate change issue and its impact, but for different reasons. You may have the floor and advise your group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary.</p> <p>You may play your role either as individual or a member of a specific group, according to your trainer's instructions, who will pose specific questions to you so as to facilitate the discussion and proceed faster to the negotiations stage and the final decision about the scenario.</p>
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Warm up Activity Sheet

Please match appropriately the first column parts with the right ones in the second column:

1. Quantifying Carbon footprint	A. Conserve natural resources, maintain the environment, social & economic growth
2. Invest in energy saving	B. Penalty-fine due to increased GHGs
3. Sustainability and business greening	C. Measure business GHG emissions
4. Energy produced by burning fossil fuels	D. Improved competitive advantage
5. Corporate green image	E. Installing solar panels and renewables to substitute fossil fuels with electricity

After crossing the right parts, please, verify your choices here:

1. → _____
2. → _____
3. → _____
4. → _____
5. → _____

Role Cards

Role [1]: The Business Owners

The current scenarios' business and particularly its owners are interested in protecting the environment and addressing the climate change issue, but they are also concerned about the feasibility of switching from fossil fuels to alternative forms of cleaner energy and the potentially high cost of doing so.

Furthermore, they are worried about how their business must act in order to adapt to the new legislation framework for SMEs recently established in the agricultural sector, with more strict boundaries now set, regarding businesses' GHG emissions and waste.

At the same time, the business is trying to avoid receiving a penalty-fine due to the high level of GHG emissions produced by its activity, which may have already impacted to some extent on the ecosystem of the nearby area. The corporate green image is thus included in their concerns, since its activity is now under close scrutiny by stakeholders with regard to its environmental footprint.

While local pressure is rising for greening their business operations, owners have decided to invest in GHG management and energy savings to mitigate the climate change impacts, improve the business environmental footprint, guard its corporate green image, rectify any negative effects, retain a decent level of collaboration with its stakeholders, provide adequate information to the most important of them, and generally stay on course towards sustainability and growth.

Getting the business carbon-ready requires real commitment and a cultural transformation that should start with their decision. Leadership must communicate the firm's emissions targets and strategies to its employees and important stakeholders, considering monetary incentives for delivering on the targets.

The business must also share its greening objectives, relative intentions and/or plans with its partners and suppliers, so as to jointly work with the supply chain and customers to reduce the carbon risk. This will help optimize its resources and enhance its collaboration with stakeholders - including customers, supply chain partners, local community - where green implications are directed, and, crucially, its future investors.

Last but not least, the owners are aware of the opportunity arising from greening their business to improve its competitive advantage, both by reducing operational costs and by adopting a more discernible corporate green image.

Role [2]: The Local Community Representatives

The regional association representing the interests of the local community consists of people who are passionately concerned with the protection of their natural area.

Well aware of the negative consequences of the abrupt expansion of industry into their region during the last decades, they suggest that the scenario's business activity further decreases the quality of the local environment and contributes to its deterioration and the air pollution.

Many of the nearby residents feel that their environment and natural world should be protected at any cost. Therefore, they keep putting pressure on local authorities to take action by scrutinizing operations, GHGs production and waste management across local agricultural businesses, imposing penalties/fines to those that do not invest in new technologies and/or abstain from using cleaner energy.

The association also requires some regular official information by businesses of their region with detailed reports on their footprint measurements and the fossil fuels consumption, along with any future plans for investment in eco-oriented products and operations.

Role [3]: The State representatives

State representatives (public services) are especially concerned with maintaining a strong economy and increasing population in rural areas. They are seeing a growing amount of concern about the climate issue from local communities, which has to be transmitted to the business community as well.

Concerned climate scientists and environmentalists have collected a wide variety of data indicating that agricultural activity based on fossil fuels is changing the climate of both the local area and at a national level as well. In the past, reported observations remained outside of the debate for the impact of climate change, but new observations have revealed startling changes that comprise a cause of genuine concern to everyone in the local community.

Meanwhile, fossil fuel companies insist that the phenomenon of global warming is yet unproven and that attempts to reduce usage of fossil fuels would come at a prohibitively high economic cost to the country. While those companies also suggest that the warming will be beneficial, the state needs to update the legislative framework for businesses, especially SMEs and those of the agricultural sector, imposing heavier penalties-fines to the companies that keep producing high levels of GHGs emissions.

More incentives should also be given in consensus with the EU and the banking sector to support business investments in energy savings and new technologies for cleaner energy generation and usage, GHG management and recycling.

Question Sheets for Roles

Questions for Role [1]: The Business Owners

- Is it possible to measure, monitor and manage the business carbon emissions?

- How can this be done, what investments should be made?

- At what cost can this be implemented?

- How can they use technology applications to reduce costs by saving energy?

- How can they assess the monetary or any indirect benefits of turning to cleaner energy and investing in the GHG management and energy savings?

- How will this improve their competitive advantage?

- How will this improve their green image?

- What are the penalties and what practices can be used to avoid penalties?

-
-
- How to provide the right information to stakeholders?
-
-

- What is the faster way to build and maintain a green corporate image?
-
-

Questions for Role [2]: The Local Community Representatives

- What actions need to be done to ensure that the regional environment and natural world are protected?
-
-

- How to increase pressure on local authorities to act against violations of regional businesses (penalties-fines) in terms of emissions and waste that causes environmental issues?
-
-

- Are there any official reports by the local business to provide required information to stakeholders describing the impacts of its activities on the environment and the climate change?
-
-

- How to interpret such information and evaluate the corporate green image?
-
-

Questions for Role [3]: The State representatives

- Are there strong incentives suggested to the regional businesses that encourage their investment on cleaner energy, GHG management and energy savings?

- How can penalties be used?

- How to increase the awareness of the businesses about the significance of mitigating the impacts of climate change and improving its environmental footprint?

Individual Performance Evaluation Sheet

Questionnaire for Participants' Performance

Through the GoGreen role-playing simulation, you have been exposed to a range of climate change actions and ideas that you should be able to adapt in your own business context.

The following questions aim to assess whether and to what extent the learning objectives and outcomes of the training have been achieved. Please, answer using a 7-point Likert scale (from "1=Not at all" to "7=To a great extent").

Do you feel that through undergoing the current simulation training, you:

- have acquired more detailed knowledge about the climate change impacts caused by your company activities?
1 2 3 4 5 6 7
- identify easier the major factors-operations of your company leading/contributing to the climate change impacts?
1 2 3 4 5 6 7
- have comprehended well what the carbon footprint of your company reflects?
1 2 3 4 5 6 7
- have learned about the significance of GHGs measurement?
1 2 3 4 5 6 7
- are more familiar with applying specific practices for reducing GHG emissions?
1 2 3 4 5 6 7
- may describe better why adopting a corporate green image is beneficial for your company?
1 2 3 4 5 6 7
- know explicitly basic green practices to improve your business competitive advantage?
1 2 3 4 5 6 7
- recognize that penalties/fines can be imposed due to excessive GHG emissions produced?
1 2 3 4 5 6 7
- are able to apply a simple carbon footprint measure technique?
1 2 3 4 5 6 7
- are able to produce, read and interpret data for your company GHG emissions?
1 2 3 4 5 6 7
- can apply energy saving practices to reduce GHG emissions produced by your company?
1 2 3 4 5 6 7
- can use technology tools to reduce GHG emissions and improve the carbon footprint of your company?
1 2 3 4 5 6 7

• can estimate the cost reduction by saving energy?	1	2	3	4	5	6	7
• can estimate the cost reduction by using green technology applications?	1	2	3	4	5	6	7
• are in position to provide specialized information to your company stakeholders about the energy consumption of your business activities?	1	2	3	4	5	6	7
• are in position to describe in detail the processes of your company in terms of electricity, fuels, machinery required and wastes produced?	1	2	3	4	5	6	7
• are in position to provide feasible solutions to increase your corporate green image?	1	2	3	4	5	6	7
• are in position to suggest solutions that reduce your business operation costs?	1	2	3	4	5	6	7
• are in position to avoid penalties/fines by adopting more green practices?	1	2	3	4	5	6	7
• are in position to improve your business competitive advantage by adopting green practices?	1	2	3	4	5	6	7
• are in position to defend your company and promote your interests when negotiating with stakeholders, green policy-makers and regulators about climate change?	1	2	3	4	5	6	7

Extended Information Sheet

Informative videos about the climate change and global warming

<https://www.nationalgeographic.org/video/climate-101-cause-and-effect/>

https://climate.nasa.gov/climate_resources/139/video-global-warming-from-1880-to-2020/

<https://youtu.be/8Rvl6z80baI>

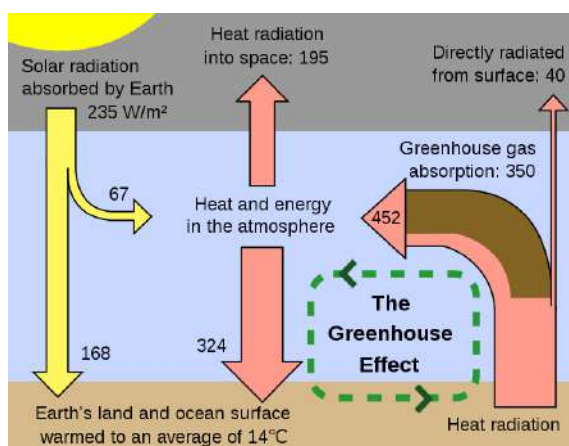
Introduction to GHG

What is the GHG (Greenhouse Gas) effect?

The greenhouse effect is the process by which radiation from a planet's atmosphere warms the planet's surface to a temperature above what it would be without this atmosphere.

Radiatively active gases (i.e., greenhouse gases) in a planet's atmosphere radiate energy in all directions. Part of this radiation is directed towards the surface, thus warming it.

The intensity of downward radiation – that is, the strength of the greenhouse effect – depends on the amount of greenhouse gases that the atmosphere contains. The temperature rises until the intensity of upward radiation from the surface, thus cooling it, balances the downward flow of energy.

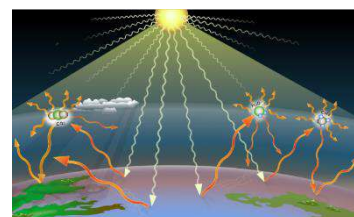


What is a GHG (Greenhouse Gas)?

A greenhouse gas (GHG) is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect.

The primary greenhouse gases (with their percentage contribution to the greenhouse effect) in Earth's atmosphere are:

- ✓ water vapor, 36–70%
- ✓ carbon dioxide, 9–26%
- ✓ methane, 4–9%
- ✓ ozone, 3–7%



Without greenhouse gases, the average temperature of Earth's surface would be about -18°C (0°F)

Why is it important?

Climate change caused by excess greenhouse gases and a big carbon footprint can cause:

- Heat waves that can damage crops and livestock.
- Increased air pollution, linked to health problems.
- Severe storms, flooding, higher sea levels and extreme weather
- Loss of habitat as the climate changes

What is the Carbon Footprint?

Carbon footprint is the total greenhouse gas (GHG) emissions caused by an individual, event, organization, service, place or product, expressed as carbon dioxide equivalent. It includes carbon dioxide — the gas most commonly emitted by humans — and others, including methane, nitrous oxide, and fluorinated gases. Usually, the bulk of an individual's carbon footprint will come from transportation, housing and food.

Video: How Heavy is Your Flight - Understanding the Carbon Footprint of Air Travel (1min)

<https://www.youtube.com/watch?v=kh3QXjfmEWc>

Greenhouse Gases and Global Warming (4min)

<https://www.youtube.com/watch?v=dw9KO9JsGGk>

Climate Change - We are the PROBLEM & the SOLUTION (Animated Infographic) (9min)

https://www.youtube.com/watch?v=-D_Np-3dVBQ

Calculate your personal Carbon Footprint with Online Carbon Footprint Calculator:

Simple: <http://www.footprintcalculator.org/>

More complex: <https://www.nature.org/en-us/get-involved/how-to-help/carbon-footprint-calculator/> (in imperial units)

GHG emission reduction example details

An LED lamp or LED light bulb is an electric light that produces light using light-emitting diodes (LEDs). LED lamps are significantly more energy-efficient than equivalent incandescent lamps and can be significantly more efficient than most fluorescent lamps.

The most efficient commercially available LED lamps have efficiencies of 200 lumens per watt (Lm/W) and commercial LED lamps have a lifespan many times longer than incandescent lamps.

A standard light emitting around 800 lumens would need approximately 60W power if it is incandescent and around 8W power if it is LED. And the LED version would last 10 to 15 times longer than the incandescent.

What can you do to reduce GHG emissions in your organization office and reduce operation costs?

WITH NO INVESTMENT COST:

- ✓ Switch to LED lightning
- ✓ Turn off lights
- ✓ Reduce winter household thermostat
- ✓ Increase summer household thermostat
- ✓ Print double sided

WITH INVESTMENT COST:

- ✓ Replace refrigerator/printers/copiers/computers and all electric appliances with Energy Star versions
- ✓ Improve building Insulation
- ✓ Install PV (photovoltaic) panels
- ✓ Install solar water heater

- ✓ Install low flow faucets and toilets

What can you do to reduce GHG emissions in your organization transport and reduce operation costs?

WITH NO INVESTMENT COST:

- ✓ Take public transportation for company travel
- ✓ Implement eco driving in company vehicle drivers
- ✓ Maintain the vehicles
- ✓ Reduce air travel
- ✓ Teleconferencing
- ✓ Allow flexible working
- ✓ Eliminate unnecessary journeys

WITH INVESTMENT COST:

- ✓ More efficient vehicles
- ✓ Purchase alternative fuel vehicle
- ✓ Purchase electric vehicle
- ✓ Purchase hybrid vehicle

Opportunities for cost reduction and real case examples:

https://www.youtube.com/channel/UC8jvrgT_4RfSLxDgrMwlK8w/videos

Specifically:

UQx Carbon101x 1.5.1.5 Case Study: Jingeri Farm (4min)

<https://www.youtube.com/watch?v=YXBf7qWwJcM>

UQx Carbon101x 1.5.1.3 Case Study: UnitingCare Queensland (7min)

<https://www.youtube.com/watch?v=54fDBBq0rkg>

UQx Carbon101x 1.5.1.4 Case Study: The University of Queensland (6min)

<https://www.youtube.com/watch?v=LtH0YWzdV-I>

Scenario 3

Trainees' Handout

Title of the simulation activity	The Company decides to invest in staff behaviour about GHGs emissions and waste
Duration	2 - 3 hours
Summary/overview	<p>Businesses across the globe, especially small- and medium-sized enterprises (SMEs), are responsible for taking action in the climate change challenge. As companies, and particularly SMEs, should start responding to climate change, and they lack the skills or the competencies to set appropriate targets and act in the right direction, more training is needed.</p> <p>Specifically, the companies need guidance about the ways they can promote appropriate behaviour among staff on how to efficiently use energy and manage waste production, leading to reduced costs. To achieve this, they need to be able to recognize individual and corporate sustainability values to align them with each other. The values are the foundation for the establishment of a common sustainability-related goal. Based on these values and the specific goal set, the companies can draft and design an awareness strategy that indicates all the actions to be taken: the ways the business staff can contribute to saving energy and reducing waste production, the practices that can raise their awareness and align personal with corporate values, along with specific training opportunities on how they can build relative competencies. In the same context, it is important that a strategy is built for increasing the Corporate Social Responsibility of the business unit (internally and externally), actively involving the staff in the process. This will result in the improvement of the corporate market image and long-term reputation of the business.</p> <p>GoGreen offers you the opportunity to participate in a simulation-based training workshop in the form of role-play which will help you acquire the competences required to understand how to invest in staff training on using energy efficiently. You will also receive information about energy and waste production and Corporate Social Responsibility.</p> <p>Your participation in the role-play simulation workshop will allow you to explore realistic situations by interacting with other people in a managed way to develop experience and try different strategies in a supported environment. You might be playing a role similar to your own (or likely one that you will perform in the future), or you could play a different one but part of the conversation or interaction that is developed around the business environment. Both options provide the possibility of significant learning, with the former allowing valuable experience to be gained and the latter encouraging you to develop a better understanding of the situation from another point of view. In any case, through the structured role-play, you will get exposed to different sets of opinions and come across multiple perspectives to consider within a challenging environment.</p>
Learning objectives	<p>The main objective of this role-play simulation workshop is to help you to:</p> <p><u>Increase your understanding</u> on the following areas:</p>

	<ul style="list-style-type: none"> - organizational opportunities for sustainability awareness - ways the business staff can contribute to saving energy and reducing waste production - the contribution of staff training to the reduction of enterprises' costs that are related to energy consumption - the practices that can raise the awareness of business staff about reducing energy consumption and waste production - opportunities to improve the CSR of your company through internal and external organizational CSR actions related to GHG emissions and waste management <p>and</p> <p><u>Develop your key interpersonal competencies and skills</u> such as:</p> <ul style="list-style-type: none"> - Critical thinking - Problem-solving based on real-life scenarios - Negotiation skills - Collaboration - Judgment and decision-making
<p>Scenario</p>	<p><u>The Company decides to invest in staff behaviour about GHGs emissions and waste</u></p> <p>The scenario focuses on a business unit that specializes in advertising. The marketing agency aims to produce high quality advertising products and services for both small- and large-scale organizations of all types (e.g., telecommunications, manufacturers, technology products, etc.). They are responsible for the pre- and post-production of commercial and non-commercial advertisements as well as digital marketing practices, being external collaborators with the relevant organizations.</p> <p>The company is located in Nicosia, the capital of Cyprus. There are more than 60 people employed as permanent staff, including employees working in managerial positions (e.g., account directors, online advertising directors), creative development posts (e.g., copywriters, copyeditors, photographers, graphic designers) and broader marketing positions (e.g., media specialist, communication officers, digital marketing specialists). Staff with short contracts might also be hired during a media campaign. The company has expanded its activity both within the country and beyond, sealing collaborations with various EU companies.</p> <p>The company owns large offices in the city center but some part of the permanent staff can also work remotely, depending on their duties and responsibilities. The company also owns facilities for production of TV spots, and they possess relevant equipment, from office-based material to IT/digital equipment for possible campaigns.</p> <p>While working in various NGO campaigns related to climate change issues, the marketing agency decides to alter the practices followed by the staff within the company to be in line with a sustainable mission that they advertise (after all, they are advertising climate change action campaigns for other businesses-customers). Since the staff comes from different backgrounds that vary a lot, the company wishes to invest on corporate training that will focus on its staff behaviour. More specifically, employees will be trained on how to integrate energy-saving and waste reduction practices that will eventually benefit the</p>

	<p>company itself by providing opportunities for cost reduction. In this way, they will create a cost optimization culture within the company and harness cost reductions to improve the overall corporate strategy.</p> <p>Along with that, the company intends to focus on improving its Corporate Social Responsibility strategy, reputation and profile, by adopting a more responsible way of action. This will lead to an improvement of its respective CSR image in the market. Following a strategic Corporate Social Responsibility, the company will be able to reduce its ethical, environmental, and social impacts to achieve a sustainable goal and common mission among its staff.</p>
Your tasks	<p>The Simulation involves your placing in particular roles according to the scenario that you have to act out. Three main roles are entailed in the current scenario:</p> <ul style="list-style-type: none"> [1] The marketing agency business owners [2] The marketing agency managers [3] The marketing agency staff <p>Each of these groups is planned to be represented by one participant, who will argue for his/her group's interests, but he/she will speak out as a single delegate. You may have the floor and advise your group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary.</p> <p>You may play your role either as individual or a member of a specific group, according to your trainer's instructions, who will pose specific questions to you so as to facilitate the discussion and proceed faster to the negotiations stage and the final decision about the scenario.</p>

Warm up Activity Sheet

ACTIVITY 1_ Searching for participants' individual interest in the topic of the green economy.

Start a small discussion among all the participants. Ask them following questions:

- 1) What is your personal motivation for caring for the environment? Why?
- 2) Where do you see the biggest problem?
- 3) Which topic are you most interested in?

ACTIVITY 2_ Please match appropriately the first column parts with the right ones in the second column:

1. Energy consumption- human activity	A. Single-use plastics during all business workshops/meetings/conferences
2. Waste production- human activity	B. Efficient Management of Human Resources
3. Internal CSR practice	C. Lighting and Air-conditioning
4. External CSR practice	D. Printing material into online version
5. Variable cost of a company	E. Donations to Charities
6. Training and learning	F. Align personal and corporate values

After crossing the right parts, please, verify your choices here:

1. → _____
2. → _____
3. → _____
4. → _____
5. → _____
6. → _____

Role Cards

Role [1]: The marketing agency business owners

The current scenarios' **business owners** have a mission to invest in protecting the environment and ameliorate the company's impact on climate change. They are interested in creating a culture within their company and among all staff that aligns with universally accepted goals (e.g., the [17 Goals of Sustainable Development](#)) that reduce the business environmental footprint. It is their priority to educate the staff in applying green practices in line with a common goal that they have all established. The overall goal is to develop and follow practices that will eventually lead to their employees' familiarization with cost reduction and increase of the company's CSR which will improve, subsequently, its market image. The owners are responsible for the policy and strategic actions to be followed, in collaboration with the whole staff. They are also aware of the financial benefits (eg. easier access to European grant schemes, more favorable bank loans and more support for private investors).

Role [2]: The marketing agency managers

The current scenarios' marketing agency **managers** are interested in protecting the environment and addressing the climate change issue, but they are concerned about finding ways to maintain the staff's green behaviour. They are in direct contact with the owners and participate in leadership actions and discussions with the business owners. These discussions include finding ways to engage the staff directly and indirectly with the identification and application of the practices that are considered energy-saving/waste-reducing. Along with that, they collaborate with the owners in developing the appropriate training and learning practices as well as increasing the Corporate Social Responsibility. They are in favour of establishing an effective management of resources, reduction of the environmental impact and improvement of the working conditions of employees. Last but not least, among their top priorities is the improvement of the company's image. They want to gain an advantage in the market over competing companies (to gain the favour of customers who consider sustainability as a very important issue).

Role [3]: The marketing agency staff

The current scenarios' marketing agency staff is the main target audience whose behaviour and attitudes the company wishes to positively influence. They are in direct contact with the managers to whom they express their concerns and opinions about the company's actions. They are responsible for applying the practices directed by the leadership teams and ensuring that they abide by the corporate rules. Right now, they don't see much sense in why they should change their daily habits.

Question Sheets for Roles

Questions for Role [1]: The marketing agency business owners

- What are the corporate values regarding sustainability?

- In which ways can we create a culture within our company that will reduce the business environmental footprint (i.e., infrastructure changes)?

- How can we ensure that our staff follow green practices in their everyday working environment (i.e., monitoring mechanisms)?

- Can we promote training practices that will lead to cost reduction (i.e., leasing)? If yes, what will the specific measures be?

- Which are the internal organizational actions, related to GHG emissions and waste management, which once applied can improve the CSR of our company?

- Which external CSR practices/initiatives can we follow, involving the staff, to create a stronger brand image and corporate reputation? What is the faster way to build and maintain a green corporate image?

Questions for Role [2]: The marketing agency managers

- How can we involve the staff in creating a common strategy for energy saving and waste reduction (i.e., introduction of a 'green ideas' box for their suggestions)?

- Which actions need to be done to ensure that the staff will follow and internalize/adopt these practices (i.e., increase of engagement)?

- How should we train the staff?

- What are the benefits of having a CSR strategy? What should be included in the CSR strategy to increase our respective market image? In which ways can the staff be involved in this strategy?

- How can we evaluate our CSR strategy?

Questions for Role [3]: The marketing agency staff

- What are the personal values we have regarding sustainability?

- Which sustainable actions can be followed in our everyday professional lives to reduce energy consumption and waste production (e.g., installation of automatic lighting)?

- Which are our needs in terms of training opportunities?

- Can we provide solutions to the key stakeholders regarding the CSR strategy of the company in which we operate?

- Is it possible to maintain these actions over a long period of time?

Individual Performance Evaluation Sheet

Questionnaire for Participants' Performance

Through the GoGreen role-playing simulation, you have been exposed to a range of climate change actions and ideas that you should be able to adapt in your own business context.

The following questions aim to assess whether and to what extent the learning objectives and outcomes of the training have been achieved. Please, answer using a 7-point Likert scale (from "1=Not at all" to "7=To a great extent").

Do you feel that through undergoing the current simulation training, you:

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| • recognize personal and corporate values, in terms of sustainability, to work towards their alignment? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • identify organizational opportunities for sustainability awareness? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • perceive ways the business staff can contribute to saving energy and reducing waste production? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • recognize the contribution of staff training to the reduction of enterprises' costs that are related to energy consumption? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • discover the practices that can raise the awareness of business staff about reducing energy consumption and waste production? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • identify opportunities to improve the CSR of your company through internal and external organizational CSR actions related to GHG emissions and waste management? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • develop and apply training strategies and practices for the familiarization of the staff in energy-saving strategies and reduce waste production? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • apply awareness practices for saving energy and reducing waste production within your company? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • apply concrete initiatives to improve the CSR profile of your company? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • adopt a corporate goal that promotes sustainable everyday actions? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| ● adopt an internal strategy for raising staff awareness related to the efficient use of energy and waste production? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ● adopt actions that align personal and corporate values in terms of sustainability? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ● provide feasible solutions for the familiarization of the staff about saving energy and reducing waste production in your business context? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| ● adopt a strategy with specific business practices and actions to improve the CSR performance of your company in the long term? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Extended Information Sheet

General knowledge on the issue of climate change and on what the GHG effect is caused by.

Human activities, from pollution to overpopulation, are driving up the Earth's temperature and fundamentally changing the world around us. The main cause is a phenomenon known as "The Greenhouse Effect" caused by gasses that trap heat in the atmosphere which are called Greenhouse Gasses (GHGs).

The EU and many other countries are trying to take action against climate change by reducing GHG emissions. This means redesigning their economies (with focus e.g., renewable energy, electric cars, supply chains etc.). Besides economics and politics, formal education, adult and vocational education and training will be required to play their role in changing people's perceptions and attitudes and practices on many aspects in the work environment and everyday life.

Therefore, it is important that entrepreneurs as well as the general public have some general knowledge on the issue of climate change and especially on what causes the GHG effect. For this, please, watch this short video about what causes climate change and what are the effects of climate change:

Watch this video: <https://www.nationalgeographic.org/video/climate-101-cause-and-effect/>

After the introductory video, you can ask yourself or discuss in the group the following questions (they are indicative):

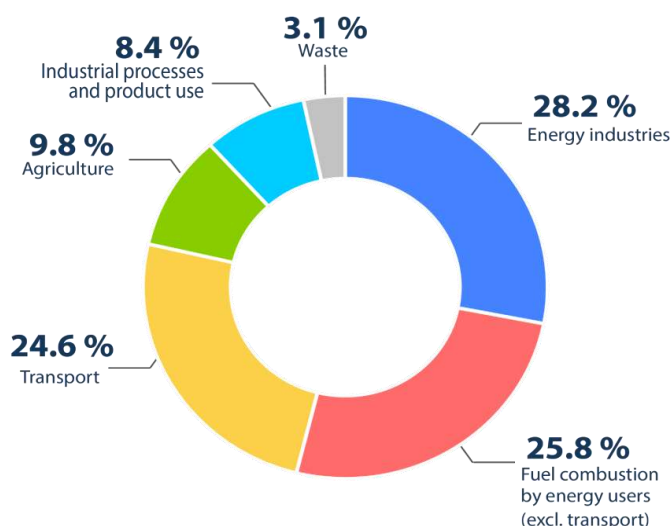
1. How do you feel about climate change? How does it affect us humans individually and collectively?
2. Why do you think companies should be more active and engaged in the green economy?
3. How can companies support and implement actions to combat climate change?
4. What are the benefits for them?

Which are the GHGs, how do they drive an increased carbon footprint and which company activities contribute to climate change and the GHG emissions.

Many of the changes observed in the climate are unprecedented in thousands, if not hundreds of thousands of years, and some of the changes, such as the continued rise of the sea level are irreversible. However, coordinated and sustained reductions in emissions of carbon dioxide (CO₂) and other greenhouse gasses can contain and limit further impact on climate change. While the benefits for air quality will be visible fairly quickly, it could take 20-30 years to see global temperatures stabilize.

In the graph on this page, you can see a primary sources of greenhouse gas emissions:

Share of EU greenhouse gas emission by source, 2017



Energy industries: Emissions from fuel combustion and to a certain extent fugitive emissions from energy industries, for example in public electricity, heat production and petroleum refining.

Fuel combustion by users (excl. transport): Emissions from fuel combustion by manufacturing industries and construction and small scale fuel combustion, for example, space heating and hot water production for households, commercial buildings, agriculture and forestry.

Transport: Emissions from fuel combustion of domestic and international aviation, road transport, railways and domestic navigation.

Agriculture: This includes among others emissions from livestock-enteric fermentation – greenhouse gases that are produced when animals digest their food, emissions from manure management and emissions from agricultural soils.

Industrial processes: Emissions occurring from chemical reactions during the production of e.g.: cement, glass etc.

Waste: Emissions from landfills, wastewater treatment and composting among others.

Data including international aviation, excluding indirect CO₂ emissions and land use, land use change and forestry.

Source: European Environment Agency

Information on the main emissions and removals of the main greenhouse gases to and from the atmosphere.

Carbon dioxide (CO₂):

<p>Carbon dioxide is the primary greenhouse gas emitted through human activities such as transportation, electricity, industry.</p> <p>It enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and other biological materials, and also as a result of certain chemical reactions (e.g., manufacture of cement).</p>	<p>The most effective way to reduce CO₂ emissions is to reduce fossil fuel consumption. Many strategies for reducing CO₂ emissions from energy are cross-cutting and apply to homes, businesses, industry, and transportation.</p> <p>Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.</p>	<p>Examples of Reduction Opportunities for CO₂:</p> <ul style="list-style-type: none"> ● Energy efficiency ● Energy conservation ● Fuel switching ● Carbon capture and sequestration (CCS) ● Changes in uses of land and land management practices
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Methane (CH₄):

<p>Globally, 50-65 percent of total CH₄ emissions come from human activities. Methane is emitted during the production and transport of coal, natural gas, and oil. Main sources are from energy, industry, agriculture, land use, and waste management activities from homes and businesses.</p>	<p>Methane emissions also result from livestock and other agricultural practices, land use and by the decay of organic waste in municipal solid waste landfills.</p> <p>Methane is also emitted by natural sources such as natural wetlands.</p>	<p>Examples of Reduction Opportunities for CO₂:</p> <ul style="list-style-type: none"> ● Upgrading the equipment used to produce, store, and transport oil and natural gas ● Altering manure management in agriculture ● Emission controls that capture and landfill CH₄
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Nitrous oxide (N₂O):

<p>Nitrous oxide is emitted during agricultural, land use, industrial activities, combustion of fossil fuels and solid waste, as well as during treatment of wastewater. Nitrous oxide is also naturally present in the atmosphere as part of the Earth's nitrogen cycle, and has a variety of natural sources.</p>	<p>Human activities such as agriculture, fuel combustion, wastewater management, and industrial processes are increasing the amount of N₂O in the atmosphere.</p>	<p>Examples of reduction opportunities for N₂O:</p> <ul style="list-style-type: none"> ● Reducing nitrogen-based fertilizer applications in agriculture ● Fuel combustion ● Technological upgrades and fuel switching in the industry
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Fluorinated gasses (Chloro-Fluorocarbons):

Unlike many other greenhouse gasses, fluorinated gasses have no natural sources and only come from human-related activities. These are synthetic, powerful greenhouse gasses that are emitted from a variety of industrial processes.	These gases are typically emitted in smaller quantities, but because they are potent greenhouse gasses, they are sometimes referred to as High Global Warming Potential gasses ("High GWP gases"). Their lifetime in the atmosphere can be from 270 to 50 000 years.	Examples of reduction opportunities for fluorinated gasses: <ul style="list-style-type: none"> ● Substitution of ozone-depleting substances in homes and businesses ● Industry ● Electricity transmission and distribution ● Transportation
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Each gas's effect on climate change depends on three main factors:

- How much is in the atmosphere?
- How long do they stay in the atmosphere?
- How long does their impact last?

What is Corporate Social Responsibility (CSR)?

Corporate social responsibility (CSR) is a company's commitment and self-regulating model to manage the social, environmental and economic effects of its operations responsibly and in line with public expectations so the company becomes socially accountable to itself, its stakeholders, and the public. By practicing CSR, also called **corporate citizenship**, companies are conscious of the kind of impact they are having on all aspects of society, including economic, social, and environmental.

CSR also refers to practices and policies undertaken by corporations that are intended to have a positive influence on the world. The key idea behind CSR is for corporations to pursue other pro-social objectives, in addition to maximizing profits. Examples of common CSR objectives include minimizing environmental externalities, promoting volunteerism among company employees, and donating to charity.

The movement toward CSR has had an impact in several domains. For example, many companies have taken steps to improve the environmental sustainability of their operations, through measures such as installing renewable energy sources or purchasing carbon offsets. In managing supply chains, efforts have also been taken to eliminate reliance on unethical labor practices such as child labor.

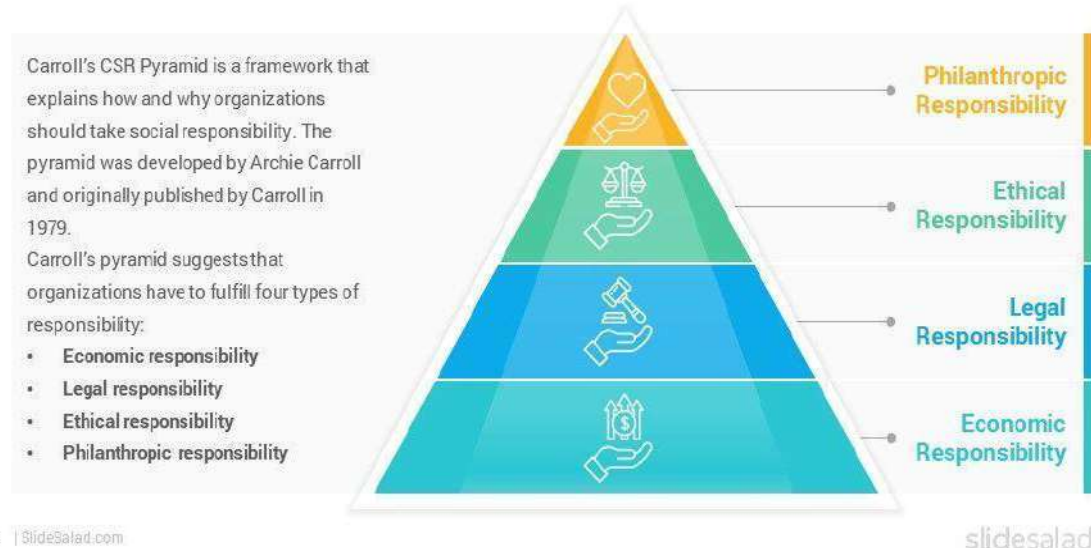
There are 2 types of CSR activities the company can follow to be following Sustainable Development Goals (SDGs) of UN Agenda 2030:

Internal CSR	External CSR
<ul style="list-style-type: none"> ● Efficient Management of Human Resources ● Occupational Health and Safety 	<ul style="list-style-type: none"> ● Donations to charities and local communities ● Limiting Noise and Air Pollution ● Business Partnerships in these activities ● Work only with Suppliers who practice CSR ● Responsible Supply Chain Management

A **corporate social responsibility (CSR) report** is a document that many companies use to communicate (both internally and externally) their CSR efforts and their impact on the environment and community.

What is Carroll's CSR Pyramid

What is Carroll's Pyramid of Corporate Social Responsibility?



An organization's CSR efforts can fall into four categories: **environmental, ethical, philanthropic, and economic.**

1. Environmental Responsibility

Environmental responsibility refers to the belief that organizations should behave in an as environmentally friendly way as possible. It's one of the most common forms of CSR. Some companies use the term "environmental stewardship" to refer to such initiatives.

Companies that seek to embrace environmental responsibility can do so in several ways, as for example by:

- Reducing pollution, greenhouse gas emissions, single-use plastics, water consumption, and general waste
- Increasing reliance on renewable energy, sustainable resources, and recycled or partially recycled materials
- Offsetting negative environmental impact by, for example, planting trees, funding research, and donating to related causes

2. Ethical Responsibility

Ethical responsibility is concerned with ensuring an organization is operating in a fair and ethical manner. Organizations that embrace ethical responsibility aim to achieve fair treatment of all stakeholders, including leadership, investors, employees, suppliers, and customers.

Firms can embrace ethical responsibility in different ways. For example:

- A business might set its own “minimum wage” which is higher than the one mandated by the state or federal government if that doesn’t constitute a “livable wage”.
- Business might require that products, ingredients, materials, or components be sourced according to free trade standards.
- Many firms have processes to ensure they’re not purchasing products resulting from abuse or child labor.

3. Philanthropic Responsibility

Philanthropic responsibility refers to a business’ aim to actively make the world and society a better place.

In addition to acting as ethically and environmentally friendly as possible, organizations driven by philanthropic responsibility often dedicate a portion of their earnings. While many firms donate to charities and nonprofits that align with their guiding missions, others donate to worthy causes that don’t directly relate to their business. Others go so far as to create their own charitable trust or organization to give back.

4. Economic Responsibility

Economic responsibility is the practice of a firm backing all of its financial decisions in its commitment to do good in the areas listed above. The end goal is not to simply maximize profits, but positively impact the environment, people, and society.

Here is a real example of a CSR report from a well-known company like [Disney for 2019](#).

Sources of information:

Climate change and GHG:

Green Curriculum_Project GoGreen

<https://www.eea.europa.eu/>

<https://www.epa.gov/ghgemissions/overview-greenhouse-gases>

CSR:

<https://www.investopedia.com/terms/c/corp-social-responsibility.asp>

<https://online.hbs.edu/blog/post/types-of-corporate-social-responsibility>

Scenario 4

Trainees' Handout

Title of the simulation activity	The Company decides to invest in: <ul style="list-style-type: none"> a) GHG management, b) energy savings, and c) staff behaviour about GHGs emissions and waste.
Duration	3 hours and 20 minutes
Summary/overview	<p>As companies, and particularly SMEs, should start responding to climate change, and they lack the skills or competencies to set appropriate targets and act in the right direction, more training is needed for them. Despite their willingness to demonstrate strong commitment by turning green through reducing emissions, adopting a CSR behaviour, or focusing on their staff training, it is still necessary for them to develop new skills and receive proper guidance that will contribute to setting robust and credible targets in line with the current climate change implications.</p> <p>Specifically, companies need guidance about GHG measurement methods and procedures so as to first measure and then reduce their emissions. Applying energy-saving practices and using relative technology applications to reduce GHG emissions production will provide great opportunities for cost reduction, with which the companies need to be acquainted without delay. Towards this direction, climate-related penalty fines and strict legislative frameworks have been added to the themes that companies need further guidance.</p> <p>Of course, sustainable practices such as energy, fuel and water efficiency and consumption, or material reuse and conservation, are practices that depend greatly on the individual within the companies. Thus, the latter need guidance about the ways that they can promote appropriate behaviour among their staff and raise the staff awareness on how to use energy efficiently and regulate waste production, contributing to reduced costs. To achieve that, they need to consider both individual and corporate sustainability values carefully, and align them with each other as well. Besides, the values constitute a fundamental aspect for the establishment of a common sustainability-related goal.</p> <p>Everything considered, it is important that a relative strategy is built for increasing the Corporate Social Responsibility (CSR) of the business (both internally and externally), actively involving and engaging the business staff in the process. This can ensure an enhanced corporate green image and a positive reputation of the business, among other CSR benefits in the long-term, which may contribute to the otherwise unreachable corporate goal of building a solid competitive advantage.</p> <p>Last but not least, companies need guidance and upskilling regarding the innovation of new green products and services, along with the communication of CSR information, green policies and relative business practices to important stakeholders.</p> <p>GoGreen offers you the opportunity to participate in a simulation-based training workshop in the form of role-play, which will help you to better understand the climate change impacts, as well as to get more knowledge about the actions that can be taken by enterprises to reduce such impacts and understand your role as</p>

	<p>entrepreneur in this process, along with the positive implications of such actions for your business.</p> <p>The training will provide you with the required knowledge, skills and individual competences to understand the impacts of your business on climate change and how to apply effective measures in order to mitigate these impacts by reducing GHG emissions, saving energy, decreasing waste, applying green technology, fostering innovation through new green products and services, training the staff on how to use efficiently energy, raising awareness of energy consumption and waste production.</p> <p>You will also learn to negotiate the need to perform eco-friendly practices and actions in your business, along with how to initiate, form, maintain and manage a green organizational policy that will ensure sustainability through an improved corporate green image and a strong competitive advantage.</p> <p>Your participation in the role-play simulation workshop will allow you to explore realistic situations by interacting with other people in a managed way in order to develop experience and try different strategies in a supported environment. You might be playing a role similar to your own (or likely one that you will perform in the future), or you could play a different one but part of the conversation or interaction that is developed around the business environment. Both options provide the possibility of significant learning, with the former allowing valuable experience to be gained and the latter encouraging you to develop a better understanding of the situation from another point of view. In any case, through the structured role-play, you will get exposed to different sets of opinions and come across multiple perspectives to consider within a challenging environment.</p>
Learning objectives	<p>The main objective of this role-play simulation workshop is binary as it intends to help you to:</p> <ol style="list-style-type: none"> 1) <u>Increase your understanding</u> on the following areas: <ul style="list-style-type: none"> ➤ Measure and reduce GHG emissions ➤ Reduce costs by saving energy policies - technology applications ➤ Reduce costs by training the staff on how to use efficiently energy ➤ Raise awareness of energy consumption and waste production ➤ Avoid penalty-fines ➤ Increase corporate green image ➤ Improve competitive advantage - first mover advantage ➤ Encourage innovation of new green products and services ➤ Provide stakeholders information <p>and</p> <ol style="list-style-type: none"> 2) <u>Develop your key interpersonal competencies and skills</u> such as: <ul style="list-style-type: none"> ✓ Critical thinking ✓ Problem-solving based on real-life scenarios ✓ Learning carbon footprint measure technique ✓ Negotiation skills ✓ Collaboration ✓ Judgment and decision-making
Scenario	<p><u>The Company decides to invest in GHG management, energy savings and staff behaviour about GHGs emissions and waste.</u></p> <p>This scenario focuses on a hypothetical business unit that is operating as a Tomato producer in the agricultural sector in your country.</p>

The company operates 5000 acres (2.240.000 sqm) of cultivated land located in the southern region of the country, owning half of the land and renting the other half of the land. Its main crop product is the tomato, which grows in different varieties like Elpida, Belladonna, Dafni, Cherry and Pomodoro. All tomato varieties and sizes can be packed in different packs, i.e., one-row carton, double-row carton, triple-row carton, and plastic packaging (small net, box or cup).

The company owns agricultural machinery and equipment (for growing and harvesting), along with a facility of 1800 sqm used as warehouse and for production tasks: sorting, grading, packing, storage, distribution and sale. Its permanent staff consists of 6 persons in administrative taskforce (direction, sales and marketing, procurement, administration), 4 persons in production (warehouse, packaging, distribution and maintenance) and 5 persons in growing and harvesting (including land/crop operation and tractor drivers). While occupying 15 persons permanently, the company hires 4-6 additional persons seasonally for the harvesting and packing needs. The staff, both permanent and seasonal, comes from different background settings in terms of culture, education, environmental consciousness, etc.

The company ownership (management) has recently been taken over by the second generation of the founder family and the current management has a more innovative thinking and strategic vision for the business than the founding management. Being aware of the climate change and analyzing the actual framework and environmental impact of the business (energy consumption, production of waste, fertilizers and pesticides, etc.) the management is considering the possibility of implementing a project to reduce the environmental footprint of the business. But being also aware that all actors in the business have a great impact, they want to invest in corporate training with focus on staff's behavior to increase energy-saving and waste reduction practices that will eventually benefit the company itself by providing opportunities for reduction of cost.

As this is a project that involves several actors, the management has planned a meeting with the staff representative, while they have also invited an environmental expert as an external professional to provide advice and a local community representative to discuss their GREEN Project. This is a project of investment in **GHG management** and **energy savings** and the **staff training** in order to reduce operational costs, mitigate climate change impacts and improve the environmental footprint of the company. Keep in mind that the business budget is not without limitation, thus, the management (business owners) will always opt for the most cost-effective path in every short- or long-term decision they have to make.

The key contextual details to discuss and negotiate about during the role-playing are summed up at the following points:

- Acquisition of **new low energy green tractors/trucks/equipment**, and selling any old high fuel consumption equipment.
- Installation of **solar panels on the warehouse roof**.
- Adopting a company-wide **switch off policy**.
- Adopting a policy that prioritizes the **eco-management of business waste** disposal, materials reuse and recycling.
- Investment in more **eco-oriented product packaging** trying to avoid plastic.
- Investment in a basic general training for their staff about GHG emission and energy saving and reduce waste production

	<ul style="list-style-type: none"> • Creating a yearly competition with a Green Staff Award for the winning employee. • A monitoring process/protocol to quantify how much carbon dioxide the business is generating. • Costs involved in measuring, monitoring and managing carbon emissions. • Energy efficiency improvements can deliver attractive returns on investment. • Putting a lot of effort on achieving high process efficiency, mainly optimizing fertilizers and pesticides use. • Comparing the fixed and variable costs a business has to pay. • Aligning personal and corporate values in terms of sustainability. • Co-building a strategy for Corporate Social Responsibility. • Establish a CSR disclosure to provide all respective CSR information to the important business stakeholders.
Your tasks	<p>The Simulation involves your placing in particular roles according to the scenario that you have to act out. Four (4) main roles are entailed in the current scenario:</p> <ul style="list-style-type: none"> [4] Business owners, [5] The Environmental Expert [6] The Local Community Representative [7] The Company Staff Representative <p>Each of these groups is planned to be represented by one participant, who will argue for his/her group's interests, but he/she will speak out as a single delegate. All four delegates are concerned with the climate change issue and its impact, but for different reasons. You may have the floor and advise your group delegate both before and during the role-play, adding useful key-points in the discussion if and whenever necessary.</p> <p>You may play your role either as individual or a member of a specific group, according to your trainer's instructions, who will pose specific questions to you so as to facilitate the discussion and proceed faster to the negotiations stage and the final decision about the scenario. The questions are useful as a guide/support/reflection for the simulation training and they do not need to be explicitly answered.</p>

Warm up Activity Sheet

Please match appropriately the first column parts with the right ones in the second column:

1. Quantify carbon footprint	A. Penalty-fine due to increased GHGs
2. Invest in energy saving	B. Align personal and corporate values
3. Improved competitive advantage and sustainability	C. Install solar panels and renewables to substitute fossil fuels with electricity
4. Energy produced by burning fossil fuels	D. Develop CSR strategy, build corporate green image and inform stakeholders
5. Staff training about climate change	E. Innovative packaging without plastic and decreasing shipping distances
6. Apply green policy practices	F. Measure business GHG emissions

After crossing the right parts, please, verify your choices here:

1. → _____
2. → _____
3. → _____
4. → _____
5. → _____
6. → _____

Role Cards

Role [1]: The Business Owners

This scenario's Business Owners are also the Management of the company and have the mission to make decisions and set policies that are in the best of their company's interests.

In their daily operation, the main objective is to manage the financial matters of the business (annual budget, revenues and expenses monitoring, payments and wages, profit returns to the shareholders, etc.) and manage the permanent and temporary staff and operations (supplies, production, sales, distribution, marketing and promotion efforts, communication, CSR etc.).

In the long term, the Management (owners) is in charge of the strategic planning (goals, opportunities and investments), responsible for shaping and applying policies, coordinating procedures, representing the company externally/publicly, and engaging the staff into corporate operations and decision making.

The current owners (management) have adopted a more innovative thinking and strategic vision for the business than the previous generation and are much more conscious of the effects and impact on the environment of their business operation and function (GHG emission, energy consumption, production of waste, fertilizers and pesticides) and the goals of their term of office is to reduce costs of operation, mitigate climate change impacts and improve the environmental footprint of the business.

At the same time, they strive to ensure the continuous education of the staff in line with the cutting edge of proper utilization of land, equipment/technologies, environmental protection, and tomato growing/production/processing.

They are interested in creating a culture within their staff that aligns with universally accepted goals aiming to reduce the business environmental footprint. It is a priority to educate the staff in applying green practices in line with a common goal that they have all established. This will increase the company's CSR and improve its brand image at the market.

Last but not least, the Business Owners should always keep in mind that the business budget is not without limitation, and they need to strive for the most cost-effective path in every short- or long-term decision they make.

All these together will eventually lead to cost reduction and increase both the company and staff benefits.

Role [2]: The Environmental Expert

In this scenario, the Environmental Expert is an external professional working as an Environmental Consultant for a private consultancy firm. He/She is an expert who can assess and monitor the impact of any activity on the environment, identify environmental issues, and provide solutions.

The environmental consultant can help companies to address environmental issues and reduce their environmental impact in areas such as water, air and soil contamination, waste production and management, etc. having extensive knowledge on environmental regulations and current legislation, along with the scientific knowledge and technical expertise to perform environmental analysis, assessments and recommendations.

The consultant is also well aware of any local, regional, national and EU financial funding opportunities for green/sustainable transitions for agri-food business.

In the case of this scenario, the Environmental Consultant has been invited by the management to the project meeting to give some not-binding advice and his/her point of view in any question that may arise during the meeting.

Role [3]: The Local Community Representative

The regional association representing the interests of the local community consists of people who are passionately concerned with the protection of their natural area.

Well aware of the negative consequences of the abrupt expansion of industry into their region during the last decades, the local community representative suggests that the scenario's business activity further decreases the quality of the local environment and contributes to its deterioration and the air pollution.

Many of the nearby residents feel that their environment and natural world should be protected at any cost. Therefore, they keep putting pressure on local authorities to take action by scrutinizing operations, GHGs production and waste management across local agricultural businesses, imposing penalty-fines to those that do not invest in new technologies and/or abstain from using cleaner energy.

The association through its representative also requires some regular official information by businesses of their region with detailed reports on their footprint measurements and the fossil fuels consumption, along with any future plans for investment in eco-oriented products and operations.

Role [4]: The Company Staff Representative

The company staff comes from a great variety of education and cultural background. When hired, they are in general committed to several core values from the company like: respect, knowledge, cooperation and continuous improvement.

But on the other side, the staff is also satisfied with how things are currently working, along with the systems and procedures that have been in place for years, and even if they are aware of the importance of environment and sustainability, it is not an issue at the top or very high in their priority list.

The current scenarios' staff is the main target audience whose behaviour the Company Owners wish to positively influence because they are actually responsible for putting any plan into action and applying the practices directed by the leadership team.

Question Sheets for Roles

Questions for Role [1]: The Business Owners

- Is it possible to measure, monitor and manage the business carbon emissions?

- How can we assess the monetary or any indirect benefits of turning to cleaner energy and investing in the GHG management and energy savings?

- Which are the fixed and variable costs of our company?

- How much will it cost if we proceed to the changes proposed and will it support our operations or bring additional risks instead?

- What costs are going to be reduced?

- How will this practice increase our competitive advantage?

- What are the corporate values regarding sustainability?

- How can we evaluate our current CSR and green strategy?

- What are the benefits of having a green-oriented CSR strategy?

- What should be included in the environmental aspect of our CSR strategy to increase our green image?

- Is there any skills deficit within our staff about following the GREEN Project and alter our business practices? And if we have to upskill, what kind of training we can provide, what will be the cost and what will be the benefits?

- How can we involve the staff in the creation of a common strategy for energy saving and waste reduction? How can we determine if they would support such a move or change?

- How to provide the right information to stakeholders?

Questions for Role [2]: The Environmental Expert

- Is it possible to measure, monitor and manage the business carbon/GHG emissions? And at what cost can this be implemented?

- Are there incentives suggested to the regional business that encourage its investment on cleaner energy, GHG management and energy savings?

- What technologies can be used?

- How innovative can we be?

- Are there any public funding schemes/options that could help some of the proposed actions?

- Can we highlight the benefits of the sustainable transition and motivate the business owners (management) to consider this approach, including the avoidance of penalties?

Questions for Role [3]: The Local Community Representative

- What actions need to be done by local companies to ensure that the regional environment and natural world are protected?

- How to increase pressure on local authorities to act against violations of regional businesses (penalties-fines) in terms of emissions and waste that causes environmental issues?

- Are there any official reports by the local business to provide required information to stakeholders describing the impacts of its activities on the environment and the climate change?

- How to interpret such information and evaluate the corporate green image?

Questions for Role [4]: The Staff Representative

- Which sustainable actions can be followed in our everyday professional lives to reduce energy consumption and waste production?

- Is it possible to maintain these actions over a long period of time? Are we really and practically unsustainable if things stay as they are?

- What is the impact we are having on the environment?

- What are the incentives to change and move away from the status quo?

- Are there any other initiatives that we could take on to be more environmentally sustainable?

- Which actions should be done to ensure that the staff will be upskilled in order to follow and internalize/adopt these practices?

Individual Performance Evaluation Sheet

Questionnaire for Participants' Performance

Through the GoGreen role-playing simulation, you have been exposed to a range of climate change actions and ideas that you should be able to adapt in your own business context.

The following questions aim to assess whether and to what extent the learning objectives and outcomes of the training have been achieved. Please, answer using a 7-point Likert scale (from "1=Not at all" to "7=To a great extent").

Do you feel that through undergoing the current simulation training, you:

- have acquired more detailed knowledge about climate change impacts caused by your company activities?
1 2 3 4 5 6 7
- identify easier the operations of your company contributing to climate change impacts?
1 2 3 4 5 6 7
- have comprehended well what the carbon footprint of your company reflects?
1 2 3 4 5 6 7
- have learned about the significance of GHGs measurement?
1 2 3 4 5 6 7
- are more familiar with applying specific practices for reducing GHG emissions?
1 2 3 4 5 6 7
- describe better why adopting a CSR strategy and a corporate green image is beneficial both for the climate and your company?
1 2 3 4 5 6 7
- know explicitly basic green practices to improve your business competitive advantage?
1 2 3 4 5 6 7
- recognize that penalties/fines can be imposed due to excessive GHG emissions produced?
1 2 3 4 5 6 7
- have understood how the staff can contribute to business cost reduction by saving energy and reducing waste production?
1 2 3 4 5 6 7
- have realized the significance of training, educating and raising awareness among the staff of your company about climate change, efficiency of energy and waste production?
1 2 3 4 5 6 7
- are able to apply a simple carbon footprint measure technique?
1 2 3 4 5 6 7
- are able to produce, read and interpret data for your company GHG emissions?
1 2 3 4 5 6 7

• can apply energy saving practices to reduce GHG emissions produced by your company?	1	2	3	4	5	6	7
• can improve the carbon footprint of your company through technology and innovation?	1	2	3	4	5	6	7
• can estimate the cost reduction by saving energy or using green technology applications?	1	2	3	4	5	6	7
• can apply awareness raising practices among the staff for saving energy and reducing waste production within your company?	1	2	3	4	5	6	7
• can undertake concrete initiatives to improve your company CSR profile and green image?	1	2	3	4	5	6	7
• are in position to provide specialized information to your company stakeholders about the energy consumption and waste production of your business?	1	2	3	4	5	6	7
• are in position to estimate the needs of your company in terms of electricity and fuels?	1	2	3	4	5	6	7
• are in position to provide feasible solutions to increase your corporate green image?	1	2	3	4	5	6	7
• are in position to suggest solutions that reduce your business operation costs?	1	2	3	4	5	6	7
• are in position to avoid penalty-fines by adopting more green practices?	1	2	3	4	5	6	7
• are in position to improve your competitive advantage by applying a CSR strategy and establishing a main corporate goal that promotes sustainability in the long term?	1	2	3	4	5	6	7
• are in position to defend your company and promote your interests when negotiating with stakeholders, green policy-makers and regulators about climate change?	1	2	3	4	5	6	7
• are in position to raise staff awareness and develop training programs about efficient use of energy and waste production in your business context?	1	2	3	4	5	6	7
• are in position to align personal and corporate values in terms of sustainability?	1	2	3	4	5	6	7

Extended Information Sheet

Role [1]: Business Owners

What more should you know?

- Business financial numbers example
- Tomato production procedures and operation
- GREEN Project costs (benefits)
 - Solar panel cost
 - EV cost
 - Training cost
 - Eco-oriented product packaging

Data and links:

Example of tomato company financial statement

Profit and loss account	
Turnover	980.000
+ Variation in stocks +/-	-2.000
+ Other operating income	1.000
=operating income	979.000
- Costs of material & consumables	-130.000
- Other operating charges (rental, ...)	-80.000
- Remuneration and charges(Staff costs)	-480.000
= Gross operating Profit or Loss	289.000
- Depreciation and value adjustments on non-financial assets	-90.000
= Net operating Profit	199.000
+ Financial income and value adjustments on financial assets	800
- Interest paid	-400
- Similar charges	0
= Profit/Loss on ordinary activities	199.400
+ Extraordinary income	0
- Extraordinary charges	0
- Taxes on profits	-49.850
= Profit/Loss for financial year	149.550

- [UC COOPERATIVE EXTENSION](#)
- [SAMPLE COSTS to PRODUCE PROCESSING TOMATOES San Joaquin Valley South - Fresno County 2002](#)
- Tomatoes on 1 acre
- <https://assets.unilever.com/files/92ui5egz/production/136709a3f63425c7a6a95ae1d21a5008c0d69211.pdf/2004-sustainable-tomatoes-good-agricultural-practice-guidelines.pdf>
- <https://www.dawsongroupvans.co.uk/news/review-of-electric-lcvs>
- <https://www.tienda-solar.es/blog/en/how-much-it-will-cost-to-install-solar-panels-on-your-house/>
- <https://www.managementstudyguide.com/cost-benefit-analysis-for-training.htm>
- <https://lca-net.com/services-and-solutions/education-courses-lca/employee-participation-environmental-training/>
- http://gemi.org/resources/EHS_108.pdf
- <https://citizensustainable.com/recyclable-packaging-expensive/>
- <https://www.bbc.com/worklife/article/20180705-whats-the-real-price-of-getting-rid-of-plastic-packaging>
- <https://extension.uga.edu/publications/detail.html?number=B1312&title=Commercial%20Tomato%20Production%20Handbook>

Role [2]: The Environmental Expert

What more should you know?

- GREEN Project related costs and benefits
 - Solar panel benefits
 - EV benefits
 - Training benefits
 - Eco-oriented product packaging benefits
- Specific tomato-related environmental data

Data and links:

- <https://www.greenmatch.co.uk/blog/2014/08/5-advantages-and-5-disadvantages-of-solar-energy>
- https://www.acciona.com/renewable-energy/solar-energy/?_adin=02021864894
- <https://www.energysage.com/electric-vehicles/advantages-of-evs/do-electric-cars-save-money/>
- <https://www.goultralow.com/ev-owners/benefits/>
- <https://www.consumerreports.org/hybrids-evs/evs-offer-big-savings-over-traditional-gas-powered-cars/>
- <https://www.mjspackaging.com/blog/why-eco-friendly-packaging-is-smart-business/>
- <https://blog.weavabel.com/what-are-the-benefits-of-eco-friendly-packaging>
- <https://chronos.agency/7-advantages-of-using-eco-friendly-packaging/>
- <https://lekac.com/production/the-pros-and-cons-of-eco-friendly-packaging>

Tomato production/environment:

- <https://sarep.ucdavis.edu/are/energy/tomatoes>
- <https://healabel.com/t-ingredients/tomatoes>
- https://www.tomatonews.com/en/prefer-project-the-environmental-impact-of-tomato-products_2_225.html
- <https://www.mdpi.com/2673-4060/2/3/27/htm>

Role [3]: The Local Community Representatives

What more should you know?

- Local/Regional policy examples
- Local/Regional/National funding opportunities

Data and links:

- <https://www.eea.europa.eu/soer/2010/countries/gr/national-and-regional-story-greece>
- <https://www.oecd.org/env/country-reviews/2448632.pdf>
- https://www.congreso.es/docu/docum/ddocum/dosieres/sleg/legislatura_10/spl_92/pdfs/43.pdf
- https://en.wikipedia.org/wiki/Environmental_policy

- https://ec.europa.eu/environment/funding/intro_en.htm
- <https://blog.wallbox.com/en/greece-ev-incentives/>
- https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_brief_2010_greece.pdf
- <https://www.adaptivegreece.gr/en-us/the-project/beneficiaries-co-financers/green-fund-grfu>

Role [4]: The Company Staff

What more should you know?

- Tomato production method
 - Machinery/equipment
 - Seeding/harvesting, ...
- Tomato packing method/systems

Data and links:

- Packing different varieties of tomatoes – GreenCoop:
<https://www.youtube.com/watch?v=pMF1JT4AnGQ>
- Processing & Packing Line for Cherry Tomatoes & Berries (Blueberries, etc.):
<https://www.youtube.com/watch?v=Bs0itvzeT6Q>
- <https://www.almanac.com/plant/tomatoes>
- <https://wikifarmer.com/commercial-tomato-farming/>
- <https://extension.uga.edu/publications/detail.html?number=B1312&title=Commercial%20Tomato%20Production%20Handbook>
- <https://healabel.com/t-ingredients/tomatoes>
- https://www.tomatonews.com/en/prefer-project-the-environmental-impact-of-tomato-products_2_225.html
- <https://assets.unilever.com/files/92ui5egz/production/136709a3f63425c7a6a95ae1d21a5008c0d69211.pdf/2004-sustainable-tomatoes-good-agricultural-practice-guidelines.pdf>

Questionnaire for Role-Playing Evaluation *(common for all the simulation scenarios)*

Questionnaire for Role-Playing Evaluation

The following questions aim to evaluate the role-playing simulation training. Please, answer the questions using a 7-point Likert scale (from “1=Not at all” to “7=To a great extent”):

- Has the scenario been aligned with the objectives?
1 2 3 4 5 6 7
- To what extent the simulation has been appropriately challenging?
1 2 3 4 5 6 7
- Did the role-playing meet the intended purpose?
1 2 3 4 5 6 7
- Did the participants require “life savers” or additional challenges during the role-playing?
1 2 3 4 5 6 7
- Were there aspects of the scenario’s authenticity that affected the participants’ engagement?
1 2 3 4 5 6 7
- Were there times during the scenario that your own opinion of the matter shaped your argument?
1 2 3 4 5 6 7
- Did you fully commit to the role or did your own beliefs get in the way?
1 2 3 4 5 6 7
- Has there been a divide in your own business like the one in the scenario?
1 2 3 4 5 6 7

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