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SIMULATION GAME #2 GREEN MONOPOLY

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1. Introduction

1.1. Structure of this manual

The manual consists of three parts:

1. In the first part "**Background information**" you will find general information on what simulation games are and where they are used.
2. In the second part "**Didactics**" you will find information on how to use simulation games in your courses, including preparation, learning outcomes and necessary resources.
3. In the third part "**Simulation Game - Green Monopoly**" you will find the simulation game as well as all the materials for conducting the game in your courses.

The simulation game is structured into:

- story - short overview of the game
- game schedule - table of phases and their duration
- game material - for print out divided into
 - Power Point templates
 - business case
 - role cards
 - task cards
- follow up – evaluation of the game and key takeaways

1.2. How to use this guide

If you are familiar with facilitating simulation games you can skip the first part, which gives a general introduction to this teaching methodology.

Read the whole simulation game instruction to understand the meaning.

Print out the game material. Use the “background information” and the “didactics” as a general overview for simulation games in general and the description from the role cards as an in-depth instruction for the game schedule.

1.3. Project eco³

eco³ is an international research project dealing with Sustainability Management and Green Controlling in the Social Economy. An international partnership consisting of four universities and two companies from Austria, the Czech Republic, Germany and Romania worked in this Erasmus+ funded project on the development of teaching material for the qualification of future managers in the Social Economy on the topic of sustainability: a white paper, four courses, pocket lectures, and the simulation games in hand.

The funding by Erasmus+ allowed us to form a multi-professional cooperation between researchers and practitioners within the framework of a strategic partnership which enables us to develop practical content based on the latest research. All the results are available open access on the project website: <https://eco3project.org/>

2. Background Information¹

2.1. What is a simulation game?

Simulation games can be used to simulate a wide variety of areas of life. Through the application of business game methods, the participants can experience in practice which factors and dynamics take effect in life worlds relevant to them. On the one hand, this develops the ability to deal adequately with complex systems and to plan sensible strategies for action. On the other hand, the team competence of those involved is expanded, as the development of more efficient communication and organisational structures can be tested through their own actions in a largely fear-free climate.

2.2. Characteristics

- Simulated environment (e.g. social organisations)
- Given social roles (e.g. in private life: Father, mother, friend, club member, spouse; in professional life: Works council member, colleague, manager, consultant)
- Given rules (e.g. “stay in your role”)

2.3. Phases of the game (theory)

Phase 1: Communicating the initial situation.

- Short summary of the background of the game and the initial situation. Students learn more about the simulated environment and story.
- Roles: For the game, the students slip into different roles. They receive information about their role and their interests and goals.
- Present problem that needs to be solved. In every game there is a problem that has to be solved. These are often conflicts or problems where there are very divergent opinions. Examples for simulation games:
 - Experience parliamentary democracy: how are decisions made?
 - Choice of study: discover interesting study professions and to compare their characteristics with the ideas and inclinations of the students.
 - Negotiation in the international economy: how can each country achieve the highest possible profit with its products.
 - Establishment of a company: business development from the idea to a successful business.

¹ (refer to e.g. Meßner et al., 2018; Duke, 1980; Forberg, 2020; Blaschek & Spanlang, 2017; Dietrich, 2020)

- Simulation game stock exchange: manage a securities account with a fictitious starting capital.

Phase 2: Familiarisation with the roles

- Detailed information in business cases: In the subsequent **information phase**, the students read the problem outline for initial orientation, find out about the conflict and the background to the conflict as well as the objective of the simulation game. After that, game groups are formed. This should not be done completely randomly. On the one hand, it makes sense to form groups that are mixed in terms of interest; on the other hand, there are "key groups" in every simulation game on which the success of the simulation depends to a large extent, e.g., management, moderator, meeting leader, chairman. If lecturers do not want to take on such roles themselves (which is always only the second best solution), they must entrust them to particularly competent students.

In the **elaboration phase**, group members familiarise themselves with the group-specific and role-specific information. They clarify any comprehension questions that arise in the group or by asking the lecturer, use additional sources of information provided (lexicons, manuals, etc.), and visualise the concrete course of the simulation once again.

- „Protagonisation“: From what perspective should I adopt the role? Is it „me“, with my current values, just in a different position? Is it a stereotypical caricature of the position played? Is it a construction of a different, hypothetical person with his*her own goals and values?
- Fictional space: Are students allowed to carry real-life relationships and arguments into the game? Do they have the power to „define reality“, e.g. to come up with additional details about their role, company or clients not on the role cards – or should they always ask the moderator? Or are the fictional parameters of the game fixed?

Phase 3: Playing the Game

- Opinion and will formation: The group members discuss their role situation, their goals, their interests against the background of the information they have already acquired. In this sequence of the business game, passive knowledge should become active, manageable and applicable knowledge. The group sets its goals, ranks them, plans strategies for achieving the goals, and determines possibilities and limits of compro-

mises. The results should be briefly recorded in writing. In addition, it is useful to document the course of the group discussion in a protocol (a recording is also possible). Difficulties, breaks, ambiguities can thus be reconstructed better later.

- Interaction: Even with a division of labour, the interactions cannot always proceed in parallel, but often only in a temporal succession. These encompass:
 - Establishing connections with the other game groups
 - Negotiating with them
 - Searching for alliance partners
 - Feeding back to one's own group
 - Reviewing
 - Modifying the group's strategy in light of the negotiations

At the end of the interaction phase, there is the final clarification of the group position and the definition of the strategy for the subsequent application phase.

- Conference: In this phase, the positions, arguments, proposals for solutions are presented by the group spokespersons named by the groups in each case. In the application phase, which often takes the form of a conference (conference phase), the compromise is to be sought or the decision is to be made.

The remaining group members who do not play along are given observation tasks. They can either observe their own group representative (How did he/she represent our position, did he/she stick to the agreed strategy?) or the representative of another group (Was the position clear? Did he/she represent it convincingly? What strategy was recognisable?).

Phase 4: Evaluation/ Debriefing

- Evaluation for students
 - Reflection on learnings and experiences
 - „Deprotagonisation“, i.e. stepping outside of the role played
 - Discussion of transferability
- Evaluation of the game
 - Questionnaire

3. Didactics

3.1. Games

We developed two separate games:

- Simulation Game #1 „Sustainability“
- Simulation Game #2 „Green Monopoly“

The two games could be played on their own (e.g. during or after lecture) or linked together.

3.2. Before the game

The students should have attended:

- for Simulation Game **#2 Green Controlling** the courses and the knowledge previously acquired there:
 - Sustainability & Sustainability Management (132 units)
 - Green Controlling (132 units)
 - Students should watch the video regarding the work with the eco³-tool called Measures in the eco³-tool. Link: <https://vimeo.com/844190255/c7eaf2afa5>

What should the students learn before from the lectures?

- Social organisations could have a blind spot in sustainability - students should realise that.
- Sustainability is influenced by our lifestyle and our economic system.
- Which factors have the greatest influence on the topic of sustainability (e.g. electricity, travel, waste avoidance)?
 - knock-on/second-order effects such as influence on consumption patterns by staff or clients/customers, redistribution of income across the society, community development...?
- What measures have the biggest influence / the fastest results?
- Burden sharing and collaboration for emission saving can give an overall better result than individual actions.
- **How to work with the eco³-tool with the working tasks embedded into the lectures mentioned above.**

3.3. Learning outcomes

Content

- Get acquainted with the eco³-tool.
- Get acquainted with report, indicators of the Economy for the Common Good (ECG).
- Assess evaluations and draw conclusions from them.
- Develop scenarios with measures and balance advantages and disadvantages.
- Experience how to meet the obstacles when directing a company towards sustainability.
- Experience how to work together to find solutions for a social enterprise even if conflicting interests exist.
- There is not the „one correct“ approach to sustainability management.
- Not only the indicators are important, but also the individual position (how I frame my own autonomy, moral responsibility and power). Can sustainability be implemented in my company if I am not convinced of it myself?
- Dealing with uncertainty: "there is no right solution".
- Active cooperation required.
- Making decisions based on arguments, developments and data.

Individual Skills

- Recognising one's own interests.
- Recognition of conflicting interests.
- Situation analysis.
- Defining problems.
- Formulating own goals.
- Target-performance analysis.
- Making decisions about which objectives are realisable.
- Insights into political contexts.
- Insight into the course of political decision-making processes.
- Making decisions oneself.
- Bearing the consequences of decisions made by oneself.

Social skills²

- Ability to deal with conflict situations.
- Practicing frustration tolerance.
- Ability to absorb and evaluate information.
- Development of problem-solving skills.
- Development of solidarity behaviour.

² <https://www.lpb-bw.de/planspiele-didaktik#c16502>

- Development of cooperation and negotiation skills.
- Development of social sensitivity and communication skills.
- Development of decision-making and action skills.
- Development of the ability and willingness to think in alternatives.
- Development of the ability and willingness to develop one's own initiative and to look for ways to realise them.
- Development of the ability and willingness to work in different social groups.

4. Frame

4.1. Timeframe

Topic	Units
Preparation in class	4 units
Preparation (self-study)	34 units
Simulation game in class	16 units
Evaluation	6 units
Feedback (self-study)	22 units
In sum	82 units

We recommend conducting the game as a block seminar over 2-3 days.

4.2. Group size

We recommend running the game in courses of 8 people or more, so that each role is filled by at least two people. A maximum of 40 people can take part in the game, so that involvement of all students is guaranteed.

4.3. Group division

To get a good distribution of students into each group, there are different methodologies: Let them choose on their own, division by the game leader or random.

We advise using the enumeration method: Assign participants a number by counting through (1, 2, 3, 4 - 1, 2, 3, 4 - 1, 2, 3, 4 ...), then all students with number 1 are the first group, all students with number 2 form the second group and so on. This way close friends are often separated in different working groups contributing to intermixing and thus increase team capability as they must work in a group with not acquainted persons.

4.4. Tips and Tricks

Atmosphere

Simulation games live from the atmosphere in the room. Matching utensils make it work: eg. a speaker's desk. Name tags simplify the recognition of the groups representing the four organisations.

Dresscode

To enhance role identification formal attire for the simulation day might be helpful. Consider, according to your estimation, whether the request for a "business outfit" is a surplus or is excluding poor students in your case.

Start of the simulation game

To symbolise the start, a good move is to leave the room. After a short greeting, enter the room together.

Language rules

Basically, pay attention that the students address each other formally over and over again. This helps to maintain the character of the simulation game.

Language hurdles

Consider if the game is done in English that students need even more motivation to speak up. Encourage them to give it a try and do not correct grammar mistakes to avoid further discouragement. Take also into consideration that preparation might take longer in a foreign language.

Group dynamics

As you are acquainted with your students after the courses, you might take into consideration how the debate culture is. Are the students open for discussion or are they mostly silent? Do they need encouragement to present something in front of the group? You might want to stress in the onboarding phase that there are no "wrong answers".

If you know that there might be only one-sentence answers and a tendency to quick changes of mind "to get over with" - you will especially have a close look at questions provided at the role cards of the moderator.

5. Requirements

Requirements for lecturers

- Consistent, well-founded and rhetorical refusal (students will come and ask: what should I do? what is right?)
- Frustration management: not all students can be picked up with this method.
- Flexibility and talent for improvisation: not all situations can be foreseen with role and event cards.
- Watch this video to learn about the simulation game:
 - eco³ Simulation Game II – Green Monopoly:
Link: <https://vimeo.com/842757805/e8d259690f>

6. Simulation Game #2 “Green Monopoly“

6.1. Story: Sustainability management circle of organisations

The Umbrella Organisation “Care4thePeople e.V.” was founded in 1970. By the years which passed by the association has developed from a small business to a large company with different business areas. Because of this and to ensure professional leadership the decision was made to hive off different limited liability companies as subsidiary companies. At the moment there are four enterprises:

- InkuWork
- Children Houses Rainbow
- Sunshine Home
- HAPPY CARE

A few months ago, a new board director was voted in by the members of the association and took over the umbrella organisation. His/her main argument during his/her election campaign was to evolve the association in a modern and sustainable organisation. To achieve this goal, he/she invited all CEOs of the subsidiary companies to a sustainability management circle. During his/her input he/she presents the new eco³-tool which will be used to measure the sustainability of the association in the future. For the next years the umbrella organisation will focus on two main goals:

1. Reduce the CO₂-Emissions of the whole organisation by 15%.
2. All subsidiary companies need to improve their sustainability indicators in one field of the ECG (**E**conomy for the **C**ommon **G**ood)³.

Budget: 350,000 € per subsidiary company (1,4 Mio. € overall)

In a first step the companies will explore the status quo of their own organisation based on two years of sustainability data. In the second sustainability management circle they will consult in which fields of sustainability their strength and their weaknesses are based on the Economy for the Common Good Matrix. All look into the opportunities to reach the set goals and present their results and discuss them together.

- The game starts at a meeting the CEO has invited to. As a participant you slip into the role of a CEO of one of four organisations:
 - InkuWork - a job integration business
 - Children Houses Rainbow - a kindergarten

³ Matrix Development Team, 2017

- Sunshine Home - a home for elderly
- HAPPY CARE - an outpatient care organisation
- The aim of the game is to find a common solution for goals set by the Board Director.
- At the beginning the groups must get acquainted in the eco³-tool with the status quo of the data of their training organisation, find out strengths and weaknesses and discover starting points for improvement.
- Then the participants are encouraged to create scenarios with measures to achieve the set goals. This includes an exchange between the groups to find and exploit synergies and models of collaboration for solutions.
- Finally, the measures are evaluated for the umbrella organisation to see if the goals have been met.

#	Phase
0	Pre-Boarding
1	Onboarding
2	Sustainability management circle - Welcome & goals
3	Team phase I
4	Sustainability management circle - Presentation of organisations
5	Team phase II
6	Sustainability management circle - Measure overview & single results
7	Sustainability management circle - overall results

6.2. Game Materials

6.2.1. Business cases

6.2.1.1. Business case #1 – InklusWork – Job integration

InklusWork is a social enterprise with the aim of creating jobs for people with disabilities and, in the long term, enabling them to make the step towards the general labour market so that they can lead a self-determined and independent life. The organisation employs people with severe physical impairments, people with sensory impairments and people with severe mental impairments beyond the level of learning disabilities. Furthermore, people with severe multiple impairments are also cared for at InklusWork.

Employees

InklusWork employs 500 clients with a disability. 100 of them are apprenticed in the companies of InklusWork. After the apprenticeship, they have the opportunity to continue working for InklusWork if they do not find a job in the general labour market. The clients are supervised and guided in their work by 90 employees. The staff is made up of pedagogical personnel and personnel from various specialist areas. In the carpentry workshop, for example, the clients can be instructed or apprenticed by skilled workers and are accompanied by skilled personnel with a pedagogical and curative education background.

Products and services

The organisation has two sites, all of which are located in the city of Angeltown. The Headquarter houses the management and the administration. The factory hall I is also located here which contains the carpentry/joinery and production/assembly departments. The printing department and laundry are situated in the second factory hall at the Bearstreet location. In addition, InklusWork maintains two other small locations that serve as receiving and distribution points for dry cleaning.

InklusWork has a high quality of processed raw materials. Suppliers are selected according to a special selection procedure and are located regionally. When looking for suppliers, they are required to make statements about human dignity, solidarity and justice as well as ecological sustainability in their supply chain and to provide evidence of this. It is on this basis that the organisation makes judgments about its cooperation with suppliers.

Challenges with raw materials exist only with a wood product that is manufactured for the outdoor sector. A special agent is used to treat the wood, which does not meet sustainability standards and for which there is no substitute product to the knowledge of the management.

Because of this agent, there is a high emission of pollutants in the production of the wood product, through the production of the agent itself and through the production of the product (printing, carpentry, laundry, manufacturing/assembly).

The organisation is mainly oriented towards the customer market, and social services are more of a "by-product" for the management. This is reflected in the fact that employees with disabilities cannot participate in organisational development processes. Topics such as product development, production planning and work scheduling are the responsibility of the management, and the employees are not consulted. Despite the pure customer orientation, it is surprising that no surveys of customers have taken place and no product tests are carried out on or with customers. There is also a lack of transparency regarding the ingredients of the products sold.

Real Estate

The organisation owns two buildings. The Headquarter houses the management and the administration and the factory hall I which contains the carpentry/joinery and production/assembly departments. The printing department and laundry are situated in the second factory hall. In addition, InklusWork maintains two other small locations that serve as receiving and distribution points for dry cleaning. InklusWork understands itself as a pioneer in sustainable production. The organisation has already switched to eco-energy and all buildings meet the newest standard. InklusWork has already installed solar modules on all suitable rooftops. The organisation has also consulted an agency regarding the installation of a heat pump. Unfortunately a installation is not possible at the moment. The energy consumption and the area data of the real estate are shown by the table below.

	Headquarter	Factory Hall	Receiving a distribution Point I	Receiving a distribution Point II	Total
Gross floor area	2,000 m ²	1,600 m ²	100 m ²	100 m ²	3,800 m ²
Roof surface	1,000m ²	800m ²	50 m ²	50 m ²	1,900 m ²
Electricity consumption*	1,800,000	1,200,000	10,100	10,800	3,010,900
Heat consumption*	500,000	400,000	7,000	7,300	914,300

*per year in kWh

6.2.1.2. Business case #2 – Children Houses Rainbow – Kindergarten

The organisation Children Houses Rainbow consists of five kindergartens, in which 386 children are cared for and supported.

- I: Children House Lion, Angeltown, 77 Children
- II: Children House Tiger, Birdtown, 79 Children
- III: Children House Raccoon, Yellowpark, 75 Children
- IV: Children House Penguin, Bisonvalley, 70 Children
- V: Children House Meerkat, Seatown, 85 Children

Management

The management style of the kindergarten's management can be described as authoritarian. Most decisions are made directly at the upper management level without involving the employees. There are no group leaders in the kindergarten, the management leads all groups itself. As a result, the employees have little motivation and no innovative ideas reach the management. Since the management has only little time available for the individual groups, the employees feel that their concerns are not being heard. In general, employees have very little decision-making authority since management wants to be involved in most processes itself.

Each kindergarten has a budget for parties, weekly joint breakfasts, handicraft materials and events (e.g., activities at the cooperation partners). However, the employees complain that they cannot monitor the budget themselves. They do not have access to the budget. Purchases must be laid out or the invoice forwarded to management. Employees must check with management to find out the status of the budget. The kindergartens do not receive an evaluation of what they have spent the budget on.

Human Resources

The kindergarten has a total of 60 positions, 50 of which work in education. Of the 50 positions, only 43 are usually filled. The kindergarten has a greatly increased turnover among the educational staff. The rate is 30%. In addition, only 8 people applied to the kindergarten last year. Seven of the positions are regularly unfilled, so there are often staff shortages. Not least because the sick rate is 28%. The care staff consists mainly of female professionals. Due to the lack of diversity among care staff, there is also a high number of periods of parental leave. This also results in more frequent staff shortages. Recently, an employee survey was conducted and it revealed that although most of them like their daily work, they also feel that they are less able to do a professional good job due to the working conditions. It is particularly noticeable that the employees have the impression that the management is not very interested

in their opinion. In addition, it can be assumed that employee satisfaction is low due to the high level of sick leave and turnover.

Cooperations

To provide attractive offers for the children and the families, the kindergarten cooperates with various local companies.

- Farmers: At a Farmer in Angeltown (Farmer A) the children are regularly allowed to help feed the cows, goats, rabbits and ponies. The children also learn in workshops how dairy products such as yogurt or butter are made.
- A Farmer in Birdtown (Farmer B) grows vegetables and fruit (organic cultivation). At the farm the kindergarten has its own vegetable garden, which they cultivate with the help of the farmer. The harvested vegetables are processed in the kindergarten together with the children.
- Music school: some of the kindergartens cooperate with the music school and offer flute courses and early musical education on the premises of the kindergarten.
- Sports clubs: Twice a year, coaches from sports clubs come to the kindergarten. They show the children what you can do in the sports club and the children can try different sports stations (goal shooting wall, throwing, ballet) for an hour.

Results of the company's internal research on sustainability

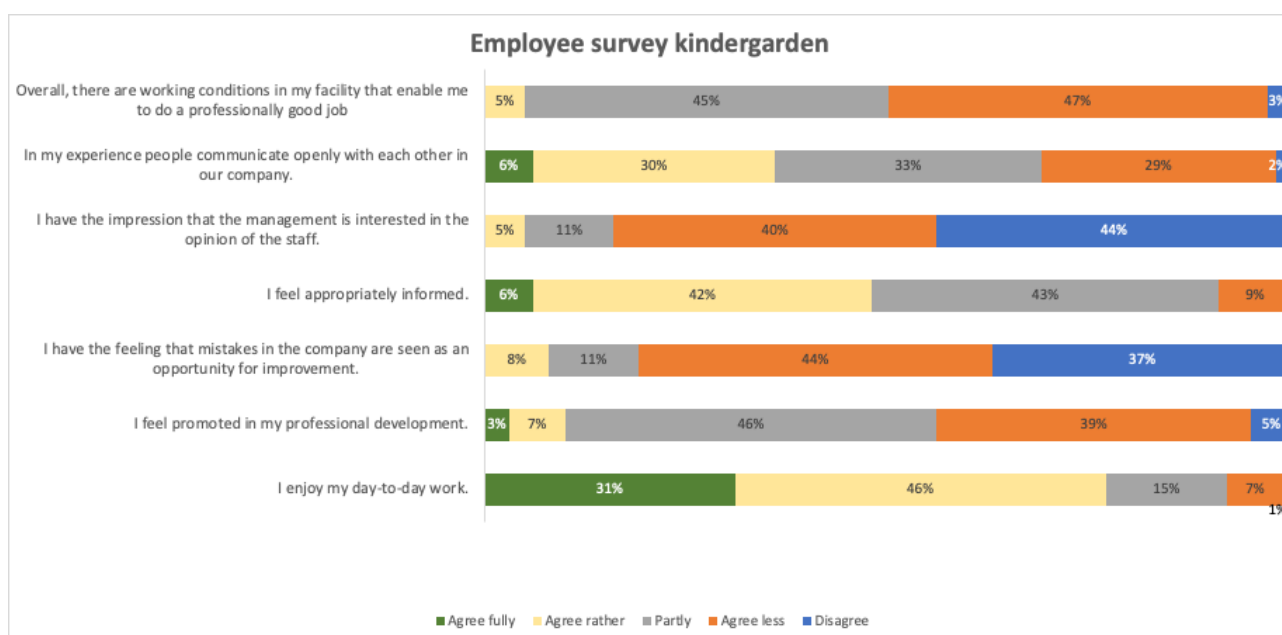
- Purchasing: Children Houses Rainbow pays attention to regionality and organic products in food procurement. It sources as much food as possible from the farmers with whom the organisation cooperates. The rest of the food comes from wholesale. All employees use a purchasing guideline.

The days for lunch consisted of the following:

- two days vegetarian dishes
- two days meat dishes
- one day fish dish
- Ecologically more advantageous products are considered if the long-term total costs are not significantly higher (e.g., for LED lighting, product lifetime, reject rate). The explicit impacts in the supply chain are usually not recorded, evaluated and assessed.
- The proportion of products with an Solidarity and Justice seal is as follows:
 - Food purchases: approx. 60%
 - Economic and hygienic products: approx. 30%
 - Clothing, home textiles, household: 0%
- There is significant potential for improvement in converting the lighting at all sites to LED.

- At catering events, attention is paid in part to ecologically sustainable supplies (e.g. fairtrade coffee, low-waste packaging, little meat, tap water instead of bottled).
- Employees use the full range of transportation to get to work. However, the distribution among the individual types of transport is very dependent on the location of the facility, the working hours and the family situation: 6% by foot, 17% bicycle, 57% car/motorcycle, 20% public transportation. Particularly at facilities in rural areas, public transport connections are inadequate, so that a large proportion of employees resort to driving. During off-peak hours, public transport connections are sometimes limited or the journey time is considerably longer than by car.
- Mandated work safety regulations are complied with throughout the company. However, there is no additional health promotion beyond that.

Results of the employee survey



Real Estate

The organisation owns five buildings. All of the buildings are in good condition. A renovation is not necessary now. The energy consumption and the area data of all kindergarten are shown by the table below.

	KiGa I	KiGa II	KiGa III	KiGa IV	KiGa V	Total
Gross floor area	390 m ²	400 m ²	380 m ²	350 m ²	440 m ²	1,950 m ²
Roof surface	195 m ²	200 m ²	190 m ²	185 m ²	210 m ²	975 m ²

Electricity consumption*	5,460	5,600	5,320	4,900	6,160	27,300
Heat consumption*	31,200	32,000	30,400	28,000	35,200	156,000

*per year in kWh

6.2.1.3. Business case #3 – Sunshine Home – Home for elderly

Sunshine Home cares for a total of 210 clients in two nursing facilities with 220 beds. The clients are accommodated in single rooms. They are accompanied to day care by qualified staff. The frequency and intensity of the care provided depends on the degree of care required. The nursing home accommodates both those in need of light care and those in need of more intensive care and they offer to accompany the clients until they pass away. The clients eat meals together in a common group room in which also afternoon activities and leisure activities take place. Other housekeeping activities, such as laundry, are carried out by the nursing home's housekeeping service.

Employees

The organisation puts particular emphasis on human dignity in the workplace in its care giving. This is particularly evident in the very high level of employee satisfaction, combined with low staff fluctuation and a normal level of sick leave. The organisation pays attention to diversification among employees at all levels. Attention is paid to a high number of further training courses in order to keep skilled employees in the company and to acquire a high proportion of managers from within the company. The organisation is also committed to broad co-decision-making and transparency within the company. This has resulted in a high degree of self-organisation and thus teams decide independently, for example, on duty schedule arrangements. Under certain conditions, specialist topics can be decided and dealt with independently by responsible employees without consulting the management. For decisions within the team or living areas, the managers involve their specialists for consultation and joint decision-making. In addition, there is a high level of transparency regarding business management and internal company data.

Suppliers

The company achieves fewer good results with its suppliers of food and textiles. This is where there are problems with human dignity in the supply chain. Due to the low price and the organisation's limited financial margin, it is dependent on sourcing goods from two suppliers who do not have a good reputation. The textiles are produced by the supplier under inhumane

working conditions and are shipped in a costly manner. The purchased food is not produced regionally and has the lowest quality level, especially in terms of animal welfare (livestock husbandry practices, chick shredding, ...) and also in terms of organic farming. In addition, the food is produced under inhumane working conditions, as the workers of the food supplier do not receive a minimum wage.

The two elderly care buildings are not yet up to the latest energy standards. The last renovation took place in 1990. Especially the insulation and better heat-insulating windows could be improved. The organisation uses donations to promote and implement internal social-ecological projects. In the investment plan for the next five years, a solar thermal system is planned. This is to be installed first at location A and after three years at location B.

Real Estate

The organisation owns two buildings. The energy consumption and the area data of all facilities are shown by the table below. Both elderly care buildings are not yet up to the latest energy standards. The last renovation took place in 1990. Especially the insulation of the facades and better heat-insulating windows could be improved.

	Real Estate I	Real Estate II	Total
Gross floor area	3,780 m ²	2,520 m ²	6,298 m ²
Roof surface	1,260 m ²	840 m ²	2,100 m ²
Electricity consumption*	809,298	539,532	1,348,830
Heat consumption*	342,594	228,396	570,990

*per year in kWh

6.2.1.4. Business case #4 – HAPPY CARE – Outpatient care

Happy Care is an outpatient care service. The outpatient care provides professional nursing and domestic care in the patient's own home by qualified nurses and nursing assistants. The aim is that people with care dependency can stay in their own homes and a mobile service visit them several times a week or even daily. Services provided are generally all prescribed care, examination and treatment services, such as basic care (e.g., morning hygiene), treatments, medication, wound care, etc. Emphasis is also placed on personal care: This means that the relationship between nurse and patient plays an important role, i.e., people are always cared for by the same nurse, who thus also acts as a contact person and confidant.

Clients

At Happy care, 138 patients between the ages of 50 and 98 are cared for, with an average age of 78. All clients live either in Yellowpark or at least within a 20 kilometres radius of Yellowpark. Annually, surveys of the patients, initiated by Happy care, take place to obtain an opinion about the care they are provided. This has shown that although the patients are satisfied with the services, in general the results are only okay. The clients are not informed about the results of the survey and suggestions or ideas of the clients are not taken up either. The main criticism of the clients is that they are poorly informed in the event of changes, e.g., regarding new staff, new medication, postponement of appointments, etc.

Management

Managing Director: Mr. Castle – responsible for finance, personnel, organisation, operations and communication

Nursing Management: Mr. Shepherd – responsible for nursing processes, compliance with nursing standards, nursing discussions with potential clients, nursing rounds, instruction of employees, professional development

Human resources

There are 24 employees, 14 of them working part-time. 19 of them are female. HAPPY CARE places a high value on satisfied and healthy employees. To achieve this goal some actions have been launched:

- Job Bike: Three bicycles are available at the care centre and can be used by employees at any time.
- Competition for the most environmentally friendly way to work: who covers the most km by public transport/bike/foot wins e-bike (sponsored by local bike factory).
- Promotion of health maintenance of employees through sports offers at the care centre and fitness studios.
- Free and anonymous consultation hours with coach for coping with stress/strain (online and face-to-face).
- Further training on health maintenance in the general further training program. Mandated work safety regulations are complied with throughout the company.
- At meetings ecological food is served

The management also maintains close contact with employees. Challenges are solved constructively together. The management sees the low sick rate as evidence of the positive effects of the actions to increase employee satisfaction and health.

Finances

HAPPY CARE had a negative operating result last year. The rising personnel costs could not be covered by higher revenues. The management is hoping for additional grants from the umbrella organisation to offset a deficit this year. Otherwise, it will be forced to cut back on activities for employees, or to cut unprofitable routes to clients in remote villages. The management has no other ideas to reduce the deficit.

Results of the company's internal research on sustainability

- In outpatient care, the use of materials is low. That is why there are hardly any suppliers.
- The management believes that HAPPY CARE already treats its employees very sustainably.
- To know the client's needs, there is always a discussion between the client, possibly his/her relatives and the responsible caregiver before the contract is signed. The employees are required to regularly ask about the satisfaction of the clients and to report changes to the management. Once a year there is a client survey. Free and anonymous consultation hours with coach for coping with stress/strain (online and face-to-face).
- Since HAPPY CARE is a rather small organisation with 24 employees, the management hardly sees any leverage of HAPPY CARE for more sustainability in the social environment.
- Management sees the vehicle fleet as the only possible adjusting screw for improving the sustainable contribution. Currently, VW up! cars with gasoline engines are in use. Four vehicles are already 10 years old.
 - Number of cars (total) – VW up!: 16
 - Estimated number of km travelled per month: 6,090
 - Vehicles 10 years old: 4
 - Vehicles less than 10 years old: 12
- Management would like to switch to electric cars, but there is no funding to do so. HAPPY CARE has no financial reserves to buy new cars. The sale of the current cars would not be able to compensate the purchase value. Current sales are also too low for leasing the cars. The management has no ideas what possibilities there would be to make good use of e.g., subsidies. Currently, the management would also like to focus on reducing the deficit.

	VW up! Existing 16 cars
Fuel type	Gasoline, Super 95
Purchase price	14,800 €
State environmental subsidies for the purchase of electric cars	0 €
Average drive costs for 100 km	9.74 €
Annual maintenance costs	440 €
Tax per year	46 €
Insurance	990 €
Annual driving power	20,000 km
Fuel consumption	4.5 l

Further information

The route planning software is already 9 years old. An employee who previously worked in another care service believes that HAPPY CARE's software does not always suggest the optimal routes. He/she had better experiences with the software of his/her former employer.

Ecological Data

	Renault Zoe
Fuel type	Electric
Purchase price	30,000 €
Average drive costs for 100 km	6.35 €
Annual maintenance costs	220 €
Tax per year	Tax free for the first 3 years
Insurance	1,680 €
Annual driving power	20,000 km

Real Estate

The organisation owns one office space for the drivers and the administration. The gross floor area is 500 m² and the roof surface is 250 m². The electricity consumption per year is 51,000 kWh and the heat consumption is 32,500 kWh per year. The building is not owned by the company. Because of this building measures are not possible.

6.2.2. Role Cards and Information for Game Leader and Board Director

6.2.2.1. Game Leader

General information

General: The Game Leader is the person who facilitates the content of the simulation game and is aware of the timing during the game phases. He/she does not host the meetings or does facilitate the discussion or decision processes. The Game Leader also uses the general tips and tricks under "Didactics".

If the role of the Game Leader and the Board Director are taken on by a single person, it is important to show the students which role is performed. A visual marker might help. Some examples might be:

- Wear a necktie, bow tie or scarf during the role of the Board Director and remove it while taking the role of the Game Leader.
- Wear a jacket or blazer during the role of the Board Director and remove it while taking the role of the Game Leader

Phase 0 - Pre-Boarding

The Game Leader decides in advance on a variant of the schedule: two-day block event or individual sessions (or other forms suitable for the curriculum).

The Game Leader divides the participants into 4 groups (= 4 business cases) plus 1 Board Director (if Board Director role is not taken by (another) lecturer). For further information about group division, see also the group division and group size above.

Before the seminar (recommendation: 1-2 weeks before the first date) the Game Leader sends the necessary documents to the participants.

Each participant should receive:

- Story
- Business cases (one per group)
- Manual eco³-tool
- Videos eco³-tool
- ECG-Manual (Matrix Development Team, 2017)

The Game Leader prepares the necessary materials for the simulation game:

- Printout of the task cards
- Printout of the schedule/timetable

- Access to the eco³-tool for all groups and the Board Director
- Manual eco³-tool: included in the tool in menu “Trainings”
- Working tasks in eco³-tool

The preparation is divided into periods of preparation in class and mainly as self-study. More about the division in chapter 4.1 – Timeframe.

Phase 1 - Onboarding

During this phase there are two main tasks for the Game Leader:

1. Give the necessary information to the participants:

The Game leader gives an overview of the game. Name the main objective of the game and give a short overview of the general structure. If necessary, also inform them how their performance will be assessed. It is also mandatory for the students to be familiar with the eco³-tool and the eco³-tool manual. This can be achieved by doing the related working tasks: 4c Key figures and 4d 2-year comparison in the eco³-tool and watch the necessary videos before playing the game (more about this in the Lecturer Guide 4 – Green Controlling). It is advisable that the students have a close look at the “Full example” in the eco³-tool accompanied by the eco³-tool manual. If you want to do the “Full example” together in class, you need more time for this phase.

2. Set the frame and motivate:

In order to achieve an immersive environment for the game a few rules and general concepts should be implied during this phase. The Game Leader informs about most important aspects:

- Remind the students to stay in the role as far as possible. Remind them of their function as a player and ask them to put themselves into the place of a manager of a social business.
- Remind them of the importance of facts and numbers in the world of management and controlling.
- Remind them to be on time during the meetings.
- Remind them to be available for interaction for their group, but also for other groups.
- Motivate them to get involved in the game - having fun and learning something can be a unique experience for the participants.

Now it could be helpful to give the students some time to find their groups and to repeat the business case together.

Phase 2 - Sustainability management circle - Welcome & goals

The Game Leader makes sure every student has received their business case, being part of a group and is familiar with the structure of the game before the sustainability management circle has started. During the sustainability management circle, the main task of the Game Leader is to support the Board Director and keep track of the time. After the sustainability management circle, he/she hands out the task card I to every group.

Phase 3 - Team Phase I

The Game Leader keeps track of the time and supports the Board Director in the preparation of the next sustainability management circle. He/she also acts as the main contact person for the students regarding questions towards the handling of the tool and briefly documents the discussion inside the group for the evaluation.

Phase 4 - Sustainability management circle - Presentation of organisations

The main task during this phase is the time management and the support of the moderator. After the sustainability management circle meeting, he/she hands out the task card II to every team.

Phase 5 - Team Phase II

The Game Leader keeps track of the time and supports the moderator in the preparation of the next meeting. He/she also acts as the main contact person for the students regarding questions towards the handling of the tool and briefly documents the discussion inside the group for the evaluation.

Phase 6 - Sustainability management circle - Measure overview

The main task during this phase is the time management and the support of the Board Director.

Phase 7 - Sustainability management circle - Overall results

The main task during this phase is the time management and the support of the Board Director.

Evaluation

The Game Leader moderates the debriefing and evaluation by using different methods i.e., explained in chapter 6.2.3. Depending on the group and the result of the game, the debriefing as well as the evaluation should be flexible. It is helpful for the Game Leader to note down and

prepare ideas for the debriefing already during the game. Afterwards he/she hands out the questionnaire.

Feedback

After the simulation game has been played, it is advisable to carry out a final feedback self-study phase. Students can write a summary of what they have experienced and learned during the simulation game.

Game schedule - two variations

Block seminar structure

#	Units	Phase	Idea of Phase	Task Card	Game Leader
0		Pre-Boarding	Get familiar with ECG. Get familiar with business case/role. Read the eco ³ -tool manual.		Hand out: Story, business cases, eco ³ -tool manual, ECG-Manual, Videos, etc.
Day 1					
1	1	Onboarding	Explain rules. Get to know the team members. Establish a uniform understanding of the business case.		Explain rules and general concept.
2	1	Sustainability management circle - Welcome & goals	Welcome and set goals. If necessary: additional questions to Game Leader.	Task card I at end of phase 2	Time management. Answer additional questions.
3	3	Team phase I	Explore status quo of own organisation. Consult where strengths and weaknesses are. Assess one fields of this matrix by regarding strengths and weaknesses.		Time management. Support Board Director. Support for handling eco ³ -tool. Documentation of the discussion.
4	2	Sustainability management circle - Presenta-	Present organisation and comparison by using "SimGame II_template_comparison".	Task card II at end of phase	Time management. Support Board Director.

		tion of organisations	Report strengths and weaknesses. Explain concentration on chosen ECG field.		
5a	2 <i>(in this timetable Phase 5 is divided in 2 sections on 2 days)</i>	Team phase II	Work with the tool: Select measures to achieve the set goals. Observing how the ECG indicators and satisfaction of stakeholders perform. Create presentation with measures.		Time management Support Board Director. Support for handling eco ³ -tool. Documentation of the discussion.
Day 2					
5b	3 <i>(in this timetable Phase 5 is divided in 2 sections on 2 days)</i>	Team phase II	Work with the tool: Select measures to achieve the set goals. Observing how the ECG indicators and satisfaction of stakeholders perform. Create presentation with measures. Consultations/negotiations with other business cases.		Time management. Support Board Director. Support for handling eco ³ -tool.
6	3	Sustainability management circle - Measure overview & single results	Presentation of selected measures. Presentation of single results by using "SimGame II_template_measures". If necessary: Negotiation between organisations for reaching goal.		Time management. Support Board Director.
7	1	Sustainability management circle - overall results	Report about goal.		Time management. Support Board Director.
Evaluation/Debriefing					

Individual Session Structure

#	Units	Phase	Idea of Phase	Task Card	Game Leader
0		Pre-Boarding	Get familiar with ECG. Get familiar with business case/role. Read eco ³ -tool manual.		Hand out: Story, business cases, eco ³ -tool Manual, ECG-Manual, Videos, etc.
Session 1					
1	1	Onboarding	Explain rules. Get to know the team members. Establish a uniform understanding of the business case.		Explain rules and general concept.
2	1	Sustainability management circle - Welcome & goals	Welcome and set goals. If necessary: additional questions to Game Leader.	Task card I at end of phase 2	Time management. Answer additional questions.
Team Phase I: Homework					
3	3	Team phase I	Explore status quo of own organisation. Consult where strengths and weaknesses are. Assess one fields of this matrix by regarding strengths and weaknesses.		Support Board Director. Support for handling eco ³ -tool.
Session 2					
4	2	Sustainability management circle - Presentation of organisations	Present organisation and comparison by using "SimGame II_template_comparison". Report Strengths and Weaknesses. Explain concentration on chosen ECG field.	Task card II at end of phase	Time management. Support Board Director Documentation of the discussion.
Team Phase II: Homework					
5	5	Team phase II	Work with the tool: Select measures to achieve the set goals. Observing how the ECG indica-		Time management. Support Board Director. Support for handling

			tors and satisfaction of stakeholders perform. Create presentation with measures. Consultations/negotiations with other business cases.		eco ³ -tool. Documentation of the discussion.
Session 3					
6	3	Sustainability management circle - Measure overview & single results	Presentation of selected measures. Presentation of single results by using "SimGame II_template_measures." If necessary: Negotiation between organisations for reaching goal.		Time management. Support Board Director.
7	1	Sustainability management circle - overall results	Report about goal.		Time management. Support Board Director.
Session 4 Evaluation/Debriefing					

6.2.2.2. Board Director

General information

General: The Board Director participates in the sustainability management circle. His/her main task is the moderation of these meetings. Hereby he/she should act in accordance with his/her role as a Board Director of a big social organisation. This is important to ensure immersion and a realistic game setting. The Board director should not take on tasks of the Game Leader!

If the role of the Game Leader and the Board Director are taken on by a single person, it is important to show the students which role is performed. A visual marker might help. Some examples might be:

- Wear a necktie, bow tie or scarf during the role of the Board Director and remove it while taking the role of the Game Leader.
- Wear a jacket or blazer during the role of the Board Director and remove it while taking the role of the Game Leader

Phase 0 - Pre-Boarding

The Board Director gets the necessary information from the Game Leader. He/she gets familiar with the story, ECG and the eco³-tool. He/she prepares the first sustainability management circle.

The preparation is divided into periods of preparation in class and mainly as self-study. More about the division in chapter 4.1 – Timeframe.

Phase 1 - Onboarding

The main tasks of the Board Director during the onboarding phase are to prepare the first sustainability management circle.

Phase 2 - Sustainability management circle - Welcome & goals

The Board Director welcomes the students to the first sustainability management circle and addresses them as managers of the diverse limited liability companies of the organisation. It may be also useful to introduce himself as the new Board Director of the association. The main goal of the project will be to evolve the association in a modern and sustainable organisation. During the last years, first steps on this way were already taken as there have been several projects for waste reduction and the responsible use of resources. After the introduction and the welcome the main task of the Board Director is to moderate the meeting. During the sustainability management circle, the Board Director also explains the story of the game to the students. He/she informs them about the decision of the association to head toward a more sustainable future. To ensure a structured approach to this goal it is essential to analyse the status-quo of each organisation by using the data of the last two fiscal years. The Board Directors also have decided on using the ECG-Matrix to structure the data. The task for each group will be to compare the data records and present the development of their organisation during the next sustainability management circle. They should also decide on one field of the ECG they want to focus on during the next years. For the meeting it might be helpful to use the Power Point template to give the students a visual context of the task.

Phase 3 - Team Phase I

The main task of the Board Director during this phase is to prepare the agenda for the second sustainability management circle. He/she is also the main contact person for the students regarding the overall task during this phase (not the handling of the tool!).

Phase 4 - Sustainability management circle - Presentation of organisations

The Board Director welcomes the managers of the organisations to the second sustainability management circle and gives a summary of the agenda. During the presentation of the companies, he/she asks questions and ensures every student has an overview of the different working fields and status quo of the companies. He/she also requests the groups to decide on which topic of the ECG they would like to focus on. Afterwards he/she sums up the status quo and informs the managers about the decision of the Board Directors to reduce the overall CO₂-Emissions of the association and to install measures to optimise the ECG. He/she also presents the overall budget, which the association gives to the companies to realise the measures. For the meeting it might be helpful to use the Power Point template to give the students a visual context of the task.

Phase 5 - Team Phase II

The main task of the Board Director during this phase is to prepare the agenda for the second sustainability management circle. He/she is also the main contact person for the students regarding the overall task during this phase (not the handling of the tool!).

Phase 6 - Sustainability management circle - Measure overview

The Board Director welcomes the managers and starts the sustainability management circle. He/she asks the groups to present their measures and the outcomes regarding the CO₂-Emissions and the ECG-Fields. During the presentation he/she also checks if the overall budget was compiled and moderates the meeting.

Phase 7 - Sustainability management circle - Overall results

After the presentation and the summary, the Board Director decides if the transformation process to a more sustainable association was successful or not. For this he/she uses the overall results in the eco³-tool (the manual can be found in the “training” section of the tool).

The simulation game was successful if:

- The overall budget was complied with.
- The overall CO₂-Emissions were reduced by 15%.
- Each company was able to better the data in at least one ECG field.

Evaluation

If the Board Director is a student, he/she participates in the evaluation like everyone else.

Feedback

After the simulation game has been played, it is advisable to carry out a final feedback self-study phase. Students can write a summary of what they have experienced and learned during the simulation game. If the Board Director is a student, he/she also participates at this part.

Game schedule - two variations

Block seminar structure

#	Units	Phase	Idea of Phase	Board Director
0			Get familiar with ECG. Get familiar with story. Get familiar with eco ³ -tool.	Prepare the first sustainability management circle.
Day 1				
1	1	Onboarding	Explain rules. Get to know the team members. Establish a uniform understanding of the business case.	Prepare the first sustainability management circle.
2	1	Sustainability management circle - Welcome & goals	Welcome and set goals. If necessary: additional questions to Game Leader.	Welcome! Present PPP: "SimGame II_welcome".
3	3	Team phase I	Explore status quo of own organisation. Consult where strengths and weaknesses are. Assess one fields of this matrix by regarding strengths and weaknesses.	Prepare the second sustainability management circle, set agenda.
4	2	Sustainability management circle - Presentation of organisations	Present organisation and comparison. Report strengths and weaknesses. Explain concentration on chosen ECG field.	Welcome, explain agenda, moderate sustainability management circle. Sum up status quo, inform about goal for CO ₂ -Emissions. Present the overall budget. Set goals.
5a	2 <i>(in this timetable Phase 5 is</i>	Team phase II	Work with the tool: Select measures to achieve the set goals.	Prepare the second sustainability management circle, set agenda.

	<i>divided in 2 sections on 2 days)</i>		Observing how the ECG indicators and satisfaction of stakeholders perform. Create presentation with measures.	
Day 2				
5b	3 <i>(in this timetable Phase 5 is divided in 2 sections on 2 days)</i>	Team phase II	Work with the tool: Select measures to achieve the set goals. Observing how the ECG indicators and satisfaction of stakeholders perform. Create presentation with measures.	Prepare the second sustainability management circle, set agenda.
6	3	Sustainability management circle - Measure overview & single results	Presentation of selected measures. Presentation of single results. If necessary: Negotiation between organisations for reaching goal.	Welcome, explain agenda, moderate Sustainability management circle. Sum up results and check the overall budget.
7	1	Sustainability management circle - Overall results	Report about goal.	Report about overall results. Decision of process was successful.
Evaluation/Debriefing				

Individual Session Structure

#	Units	Phase	Idea of Phase	Board Director
0			Get familiar with ECG. Get familiar with story. Get familiar with eco ³ -tool.	Prepare the first sustainability management circle.
Session 1				
1	1	Onboarding	Explain rules. Get to know the team members. Establish a uniform understanding of the business case.	Prepare the first sustainability management circle.
2	1	Sustainability management circle - Welcome & goals	Welcome and set goals. If necessary: additional questions to Game Leader.	Welcome! Present PPP: "SimGame II_welcome".

Team Phase I: Homework				
3	3	Team phase I	<p>Explore status quo of own organisation.</p> <p>Consult where strengths and weaknesses are.</p> <p>Assess one fields of this matrix by regarding strengths and weaknesses.</p>	<p>Prepare the second sustainability management circle, set agenda.</p>
Session 2				
4	2	Sustainability management circle - Presentation of organisations	<p>Present organisation and comparison.</p> <p>Report strengths and weaknesses.</p> <p>Explain concentration on chosen ECG field.</p>	<p>Welcome, explain agenda, moderate Sustainability management circle.</p> <p>Sum up status quo, inform about goal for CO₂-Emissions.</p> <p>Present the overall budget. Set goals.</p>
Team Phase II: Homework				
5	5	Team phase II	<p>Work with the tool: Select measures to achieve the set goals.</p> <p>Observing how the ECG indicators and satisfaction of stakeholders perform.</p> <p>Create presentation with measures.</p>	<p>Prepare the second sustainability management circle, set agenda.</p>
Session 3				
6	3	Sustainability management circle - Measure overview & single results	<p>Presentation of selected measures.</p> <p>Presentation of single results.</p> <p>If necessary: Negotiation between organisations for reaching goal.</p>	<p>Welcome, explain agenda, moderate Sustainability management circle.</p> <p>Sum up results and check the overall budget.</p>
7	1	Sustainability management circle - Overall results	<p>Report about goal.</p>	<p>Report about overall results.</p> <p>Decision of process was successful.</p>
Session 4 Evaluation/Debriefing				

6.2.3. Evaluation/Debriefing

The Evaluation should start with a ritual for “Deprotagonisation”. After the game, it is important to leave the role the students and the Board Director have taken.

Possibilities:

- Proverbially unroll oneself: Stand up and turn out the role.
- Drink a slip of water.
- Look in the mirror and say your own name.
- Unroll the role over the arms.

After the Deprotagonisation it is important to classify the events of the game and make the learnings more explicit. These key questions support the Game Leader to address the different aspects and layers. It is helpful, if the students are mixed and do not sit in their groups any-more- a line-up at the beginning may assist this.

It is important to keep an eye on the discussion, it should be the evaluation of the game, not the continuation of unsolved issues. Students that fall back into their roles should be interrupted and reminded of this.

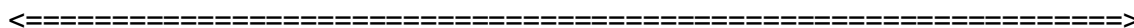
6.2.3.1. Line up

Draw an imaginary line through the room, all persons should have enough space to move. (If you and your students are not familiar with the methodology, you can start with a warm-up question to explain the process.)

0. Are you...

an early bird

a later riser



(Students will find the position in the room which fits them best when they like to get up in the morning. In the next question, 1 or 2 students for each question can be asked to rationalise their position.)

1. Are you happy with the outcome of the game for your individual organisation?

Happy



Unhappy

2. Are you happy with the outcome of the game for the overall organisation?

Happy ⇔ Unhappy

3. Was it easy to decide on the field of the ECG you would like to focus on?

Rather easy ⇔ Really difficult

4. Did you focus more on optimising your organisation in aspects of the ECG or did you focus more on reducing your CO₂-Emissions?

Reducing CO₂-Emissions ⇔ Optimising ECG area

5. How would you rate the communication between the groups during the Team Phase II?

Perfect ⇔ Miserable

6.2.3.2. Revision of the game

After the line-up the students are asked to participate in a discussion, ideally in a circle of chairs, mixed up from their groups.

Now there are two options to continue this phase depending on the result of the game:

1. The group won the game → Method: Fishbowl

The group remains in the circle of chairs. Five chairs are set in the centre of the circle. One member of each group can take a seat in the centre of the circle. The last chair remains free. During the discussion only the persons in the centre of the circle are justified to speak. If a person on the outside wants to contribute to the discussion, he/she can take a seat on the free chair. If the person has finished his/ her statement, he/she leaves the chair and returns to the outer circle.

During the Phase the following questions should be discussed:

- What could have been done differently during the game?
- Where are the main differences between reality and the simulation game?
- What are the key takeaways from the simulation game?
- What would an implementation in reality have looked like?
- Would a materiality analysis have been useful?

2. The group lost the game → Method: discussion in small groups

The group is divided into four small groups. Each group should consist of members of each subsidiary company. The groups get 20-40 minutes to discuss the following questions:

- What could have been done differently during the game?
- Where are the main differences between reality and the simulation game?
- What are the key takeaways from the simulation game?
- What would an implementation in reality have looked like?
- Would a materiality analysis have been useful?

The groups are asked to record their results on index cards.

After the discussion the groups are asked to present their results to the rest of the group. The index cards are pinned on a blackboard or a similar tool and shortly discussed inside the group.

6.2.3.3. Individual work

After the revision the students are asked to take seats. Now they have to individually answer these questions and prepare a one-minute statement:

1. The three key learnings I will take away from today are...
2. Today I learned about Green Controlling...
3. The most important step to decide on measurements regarding sustainability is...

6.2.3.4. Discussion

After the individual work the students are asked to participate in a discussion, ideally in a circle of chairs, mixed up from their groups.

1. Learnings:
Which theoretical and practical knowledge from the course was helpful for your work during the simulation game?
2. Experience:
Were you more focussed on your own organisation or did you keep the overall goal in mind? Would you like to share some internal discussions with the whole group?
3. Transferability:
How important was an analysis of the status-quo before deciding on measures?
How difficult was it to keep all aspects of the game in mind (CO₂, ECG, Budget,...)?

6.2.3.5. Questionnaire

In order to learn for subsequent simulation games, we recommend collecting the experiences, impressions, suggestions for improvement and criticisms of the participants with a questionnaire.

6.2.4. Presentation templates

You can download the presentation templates from the project website: www.eco3project.org. List of the corresponding Power Point templates:

- SimGame II_welcome
- SimGame II_template_comparison
- SimGame II_template_measures

6.2.5. Task Cards

Task Cards are reminders. They are given to each group at the beginning of each team phase to support them with a written task, after the game leader has announced the beginning of a new phase and has spoken about the upcoming task.

6.2.5.1. Preparation for presentation in sustainability management circle

Type	Name	For whom	When
Task Card	Assignments	@all	End of phase 2, before Team Phase I

Preparation for sustainability management circle: Interpretation of your weaknesses and strengths

1. Return to your team phase spot - at least one person should stay there for communication with others.
2. Work with your data tool:
 - a. Get your login data from your lecturer.
 - b. Check the existing data. Get familiar with the data and complete your picture of your organisation.
 - c. Evaluate your key figures in year 1 and your business case. Look at where your possible improvements or your possible deteriorations are. Also take a look at ecological key figures for your CO₂ footprint.
 - d. Compare your key figures between year 1 and year 2. What has improved? What has worsened?

3. Based on your possible improvements and deteriorations, discuss where the strengths and weaknesses in your company are.
4. Visualise this strengths and weaknesses in a y1/y2 comparison in the form of a presentation. Templates will be provided by the supervisor (*SimGame II_template_comparison*).
5. Look at the ECG Matrix of your organisation. Assess one field of this matrix by regarding your strengths and weaknesses.
6. At the Sustainability management circle, you will hear the strengths and weaknesses of all other groups. You will discuss the strength and weaknesses.
7. Pay particular attention to which organisations perform very well in your "weak fields." Can you learn from each other?

6.2.5.2. Elaboration of measures

Type	Name	for whom	when
Task Card	Assignments	@all	End of phase 3

Dear managers,

as we all now have an overview of the development of our organisation during the last years it is time to plan a strategic development for the next years. In order to achieve this, follow the steps on this card:

1. *Please determine the dimensions of sustainability which were given by the board director. Try to understand the goals of each field and find the one which is most fitting for your current status.*
2. *Define measures for your goal and test the effects by using the eco³-tool.*

Important: Be aware of your stakeholder analysis and the budget while defining the measures!

3. *Pick those measures which will help all organisations to meet the group goal.*

Do keep the following questions in mind:

- *How high is your contribution to the overall goal?*
- *How can I measure the success of my measures?*

Important: Keep in mind: to fulfil the task, the whole association needs to reduce its emissions by 15%. Talk to the other managers and discuss which measures are most useful for which organisation. Do also keep the budget in mind. Sometimes it can be helpful to step back from your own plans to achieve the overall goal.

4. *Return to the sustainability management circle and present your results by using a Power Point presentation (SimGame II_template_measures).*

7. References

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