

Click On Climate – IO1

Mapping practices of sustainable training within the sector of transportation and logistics





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1. Click on Climate: Brief overview on the partners.	7
• TEC, TECHNICAL EDUCATION COPENHAGEN	7
• EUC SYD	8
• CENTRO DE FORMACION PROFESIONAL XABEC	9
• Ylä-Savo Municipal Federation of Education	10
• Stichting voor educatie en beroepsonderwijs Zadkine	11
2. How we collected data	12
3. Students Perspective	13
1. According to stakeholders / companies, the current most important sustainability challenges within the sector are (including the reasons behind):	21
2. According to stakeholders / companies, these initiatives or trends have had the most positive impact within the sector of T&L during the last 5 years?	23
3. What do the stakeholders / companies need from the schools / training centres in order to further support a sustainability agenda within the sector?	25
4. Describe dilemmas when it comes to strengthening the sustainability agenda within the sector of Logistics and Transportation	26
5. How does the stakeholder / company describe the value / reflect on working with UN Sustainable Development Goals (SDGs)	29
6. COVID19: Has the current COVID19 situation influenced the ways the companies / stakeholders look upon this? In which ways does it influence them?	31
7. Conclusions and external information	32
4. Teachers Perspective	37
5. Managers Perspective	38
6. 9 Good practices teaching about SGD's	68



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1. Click on Climate: Brief overview on the partners.

- TEC, TECHNICAL EDUCATION COPENHAGEN

TEC stands as one of Denmark's premier vocational colleges, boasting a presence across six campuses in Greater Copenhagen. The institution proudly delivers a diverse range of educational offerings, including 20 Vocational Education and Training (VET) programs, three upper secondary technical examinations, and various adult training initiatives. Noteworthy programs include bridge-building courses bridging primary school and VET, and "Maker Space," a collaborative workshop with the Copenhagen municipality dedicated to fostering STEM competencies and interests.

With an enrollment of 25,000 students, 4,500 of whom are full-time, and a dedicated staff of 775, TEC exemplifies a multicultural vocational college. Approximately one-third of the student body hails from ethnic backgrounds beyond Danish borders. Students from across Denmark participate in select Vocational Specializations, while those from Greater Copenhagen engage in the majority of our educational programs.

At TEC, inclusivity is paramount. Involving students in decision-making processes and evaluations is a cornerstone of his educational philosophy. The overarching strategic priorities include positioning TEC as the first choice for students, fostering growth, promoting well-being, preventing early school leaving, and implementing talent programs.

Currently, the entire TEC staff is actively engaged in revitalizing our values and strategy, emphasizing the development and implementation of digital learning. As an internationally oriented vocational school, TEC values collaborative projects and partnerships within Europe, as well as educational initiatives extending to India and China.

In line with the demands of Industry 4.0, TEC is committed to addressing the development of soft skills alongside the integration of new technologies, ensuring their students are well equipped for the evolving landscape of vocational education and industry requirements.



- **EUC SYD**

EUC Syd stands as a contemporary technical institution with a presence in five locations across Southern Denmark: Haderslev, Aabenraa, Lundsbjerg, Tønder, and Sønderborg. The school is dedicated to providing comprehensive training within the vocational school system, offering continuous education vocational courses, leadership programs, higher technical education (post-secondary), International Baccalaureate, and pre-International Baccalaureate programs in English.

As a self-governing institution under the Ministry of Education, EUC Syd boasts an annual turnover of approximately 300 million USD. This equates to around 2,200 students per year and a workforce of approximately 350 employees, including about 250 teachers with robust pedagogical and practical backgrounds.

EUC Syd has emerged as one of the largest vocational education and training (VET) schools in Southern Denmark, fostering extensive connections with diverse student profiles, businesses, educational institutions, and various national, regional, and local companies.

Since the 1990s, the school has actively participated in numerous international projects, encompassing development, pilot, and mobility initiatives funded by the EU and various national and international sources. EUC Syd plays a crucial role in a Danish consortium – VET Denmark, dedicated to promoting educational exports for vocational education.

In collaboration with Project Zero, a prominent initiative in the Sønderborg municipality striving for zero carbon objectives, EUC Syd serves as a key local actor in the education sector. The school aligns its courses with the demand for sustainability, responsible consumption, and energy efficiency across various branches and trades. Collaboratively with Project Zero, EUC Syd has designed courses within the ZeroConstruction program to educate and train artisans, including plumbers, electricians, automation specialists, and caretakers, in the latest green technologies. These continuing education courses equip professionals with the knowledge and skills necessary to make environmentally responsible choices in their respective fields, aligning with the principles of responsible consumption.



- **CENTRO DE FORMACION PROFESIONAL XABEC**

The EIFOR Foundation serves as a Non-Profit Organization and the legal entity behind the establishment of the XABEC VOCATIONAL TRAINING CENTRE. This institution offers education within all three Spanish subsystems of vocational training: Initial Vocational Training (including 5 qualifications of Middle VET and 2 qualifications of Upper VET), Education for Employment (featuring approximately 15-17 Occupational Training courses annually), and an average of 12 Continuing Education courses tailored for companies. Xabec also provides Distant-Learning opportunities.

The center specializes in Industrial Maintenance and Building Installations, boasting ten workshops, each dedicated to a specific knowledge area such as electricity, electronics, automation-robotics, hydraulic-pneumatic, installations of cold and heat, railway maintenance, welding and boiler making, plumbing and gas, electromechanics, and renewable energies.

With a dedicated team of 53 personnel, including teaching and administrative staff, Xabec supports over 1,500 students annually. The center is ISO 9001:2008 certified and collaborates with over 200 companies, some operating internationally, such as DAIKIN, LINCOLN ELECTRIC, ABB, STADLER, DR. FRANS SCHNEIDER, and HEINEKEN, offering training, technical advice, and collaboration agreements.

Recognized by The Regional Ministry of Education and Employment and the Chambers of Commerce in 2008 for its significant contribution to vocational training in Valencia, EIFOR Foundation and Xabec have played a pivotal role in piloting the Dual Training System in the Valencia Region. All qualifications are now offered through a combination of classroom-based learning and the Dual System.

The foundation has extensive experience in practical training programs for immigrants, particularly from Africa and South America, collaborating with institutions such as the Refugee Service Centre of the Ministry of Employment and Social Security (CAR Mislata). Xabec supports the creation of a Vocational School in Nairobi, Kenya, known as Eastlands College of Technology.

Since 2012, Xabec has presided over the "Association for Innovation in Industrial Maintenance" (InnMain), a European network fostering innovation in education. The institution actively participates in EU-funded projects, collaborating with education authorities to effectively implement the dual system in Valencia.

Acknowledged by The Bertelsmann Foundation in May 2018 as the school with the best practices in the dual system of vocational training in Spain, Xabec also received recognition from the European Commission in November 2018 in the innovative Vet provider category. Furthermore, Xabec is a partner in the Global College Network, collaborating globally to provide opportunities for students and staff to gain international experience. Since 2017, Xabec has welcomed students from South America for Practical Training in the field of Industrial Maintenance.

- **Ylä-Savo Municipal Federation of Education**

YSAO (Ylä-Savo Vocational College) operates within the framework of the Ylä-Savo Municipal Federation of Education, a collective comprising 9 municipalities. As the primary provider of vocational upper secondary education, vocational adult education, and the exclusive source for vocational apprenticeships in the region, the Federation plays a pivotal role in shaping the educational landscape.

With a rich history spanning over 140 years, YSAO stands as a dynamic institution focused on selected fields, dedicated to cultivating skilled professionals tailored to the demands of the workforce. Annually, the institution engages over 4,000 students in vocational upper secondary education, adult education, and vocational apprenticeships, with a workforce of more than 200 professionals committed to education, development, and service delivery.

Beyond the educational role, the Ylä-Savo Municipal Federation of Education actively contributes to the overall development of the Ylä-Savo region. Engaging in regional initiatives within the education sector and industrial realm, the Federation supports the growth of local industries, enhances the quality of staff, and fortifies collaboration between businesses and the education sector.

Collaboration is a key tenet of its approach, and YSAO actively engages with various stakeholders. The overarching goal is to contribute to the success of our sub-region in the future.

YSAO channels its efforts into aligning with the needs of Ylä-Savo businesses, playing an integral role in implementing the region's business strategy. YSAO, is not only educators but also catalysts for regional growth and prosperity.



- **Stichting voor educatie en beroepsonderwijs Zadkine**

Zadkine stands as one of the largest vocational schools in the Netherlands, strategically located across the dynamic region of Rotterdam. Comprising 12 schools, each specializing in a distinct field, including Beauty and Fashion, Logistics, Business, Bread and Banquet, Start College, Facility, Travel and Leisure, Optics, Health and Sports, Craftsmanship, Hospitality, and Security, our institution is committed to providing comprehensive education.

Technical education is a core focus under the umbrella of Technical College Rotterdam. Currently, Zadkine serves 16,263 students, with 13,077 enrolled as full-time students, supported by a dedicated staff of 1,692 professionals.

At Zadkine, the vision is to empower every student with the best possible opportunities for development, aligning with their individual ambitions, interests, talents, and growth potential. Zadkine strives to equip them with the skills and knowledge necessary to meet the current and future demands of the employment market.

Situated in the bustling metropolis of Rotterdam, Zadkine recognizes the need to prepare students as global citizens, emphasizing continuous learning and adaptability. The commitment to a triple qualification assignment ensures inclusivity, catering to students at all levels. This approach extends to internationalization, seamlessly integrating the acquisition of international competencies. We view internationalization as a valuable tool, preparing our students for an intercultural society and the challenges of an international job market.

Zadkine embraces a forward-looking perspective, transcending borders to challenge ourselves with new international experiences. Zadkine is dedicated to cultivating an educational environment that not only meets but exceeds the expectations of our diverse student body in the ever-evolving global landscape.



2. How we collected data

The information for this report was gathered through a comprehensive approach employing three distinct methods:

Survey of Teachers:

- A specific survey was designed and distributed to a total of 54 teachers across the five institutions.
- The survey was implemented through an online form using the Google Forms platform.
- Teachers provided their responses digitally, including questions about which Sustainable Development Goal (SDG) they find most applicable to their daily activities as educators.
- This additional information will help understand teachers' perspectives regarding the impact and integration of the SDGs in their educational practices.

Survey of Students:

- Another survey was designed and administered to 127 students from the selected institutions.
- Similar to the teachers' survey, the form was made available online through Google Forms.
- In addition to addressing general aspects of sustainability, specific questions were included to assess students' knowledge of the SDGs and their perception of the applicability of these goals in their future professional lives.
- This expansion of the survey will provide valuable insights into students' awareness and the importance they attribute to the SDGs in the context of their education and future careers.

Interviews with Managers and Companies:

- Interviews were conducted with two or three managers and companies from each educational institution involved in the study.
- These interviews provided additional qualitative information and detailed perspectives on management and educational practices in each institution.
- Interviews were conducted either in person or through virtual means, depending on the availability and preferences of the interviewees.

This combined approach of surveys and interviews addresses both the experiences of educators and the perceptions of students, and is expanded to evaluate the connection of both parties with the Sustainable Development Goals. The use of digital tools such as Google Forms streamlined the process and facilitated the organization of information for subsequent analysis and presentation in this report.

3. Students Perspective

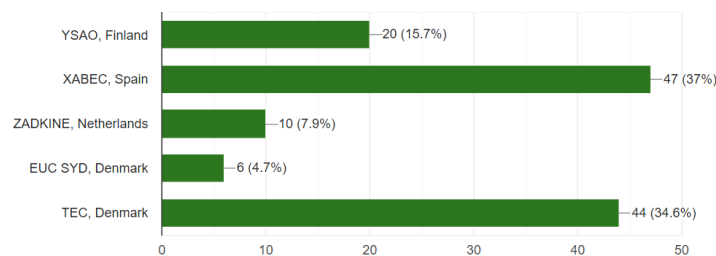
The data collection process commenced with a series of questions directed at the respondents to establish their connection with their respective educational institutions. Notably, a significant number of responses were garnered from XABEC, totaling 47 participants. In the case of EUC, although it contributed the fewest responses, it was deemed feasible to combine its responses with those from TEC, as both institutions are of Danish origin.

This decision to aggregate responses between EUC and TEC was made to strengthen the representation of Danish institutions in the collected data. Despite the disparity in the number of responses among the participating institutions, consolidating data between EUC and TEC will contribute to a more comprehensive and representative understanding of the Danish educational experience within the context of this survey.

The specific attention given to the quantity of responses from XABEC underscores the significance of this institution in the data analysis. This approach seeks to ensure fair consideration of the various participating educational institutions and guarantee an accurate interpretation of the obtained results.

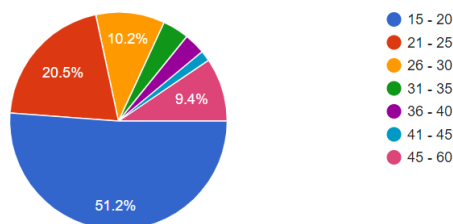
1: Where do you study?

127 responses



2. How old are you?

127 responses



Upon examining the age of participants, it is noteworthy that half of the respondents fall within the 15 to 20 age range. Additionally, when considering the percentage of participants under 25 years old, this figure rises to almost 70%. However, the uniqueness of this study lies in the fact that, despite being primarily directed at vocational students, around 30% of

participants are between the ages of 25 and 60. Within this group, the age bracket of 45 to 60 is particularly representative, constituting almost 10% of the obtained responses.

The presence of participants in the 45 to 60 age bracket is remarkable, adding an element of interest to the age diversity in the survey. It is worth noting that individuals in these age groups might be more committed to data collection activities and may have a greater predisposition to collaborate. While the percentage may seem modest, its representation in the sample significantly contributes to the variety of perspectives present in the study.

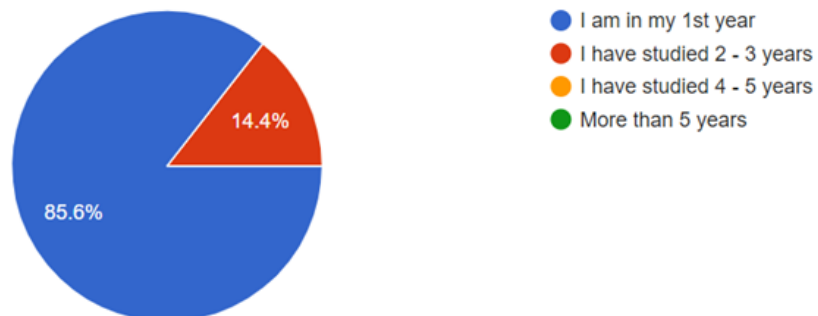
The diversity in participant ages emerges as a genuinely interesting aspect, providing a broad and enriching insight into the Sustainable Development Goals. The inclusion of different age groups adds significant nuances to the obtained responses, thereby enhancing the overall understanding of respondents' perceptions and comprehension of these objectives.

The breakdown of responses by gender is not included in this report, as almost all responses come from male respondents.

The surveyed participants primarily hail from knowledge areas specializing in logistics, vehicle maintenance, and air conditioning systems.

4. At which level are you at this moment?

125 responses

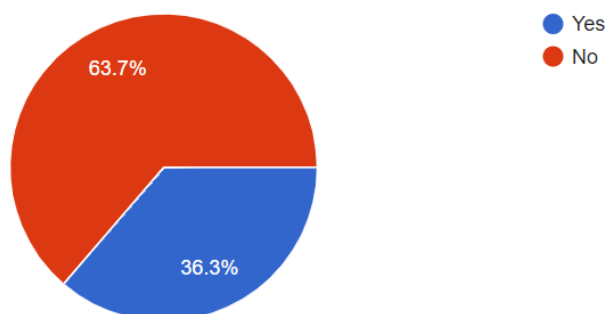


Participants were asked about the number of years they had been enrolled in the educational institution, and more than 85% indicated that they were in their first year of studies. This data gains significance when considering the predominant age group in the sample. Primarily, these students are in an early stage of their educational journey, having recently completed secondary education.

This aspect is particularly interesting as it suggests that a significant portion of the surveyed population is at a phase where their exposure to the professional world is limited. The lack of professional experience could influence their perception and understanding of the sustainable development goals. It is plausible to consider that the knowledge these students have about these goals is primarily based on what they learned during their school years, highlighting the importance of considering this context when analyzing their responses.

5. Have you heard about the Sustainable Development Goals before this survey?

124 responses



In response to the question about students' awareness of the Sustainable Development Goals (SDGs), we encountered a truly interesting finding: two out of every three respondents stated that they had not heard of the SDGs before the present survey.

We understand that, particularly for younger students who have recently completed their school years, this lack of awareness may be reasonable as they may not have yet had exposure to the working environment. However, we believe that this topic should be addressed comprehensively in education, and therefore, we would expect at least a basic level of knowledge. This discovery reinforces the significance of the project, emphasizing the need to incorporate the Sustainable Development Goals as an integral part of the content to be delivered.

In light of these results, a review of the literature has been conducted, examining research articles, and it has been observed that the responses obtained align with those of the present project.

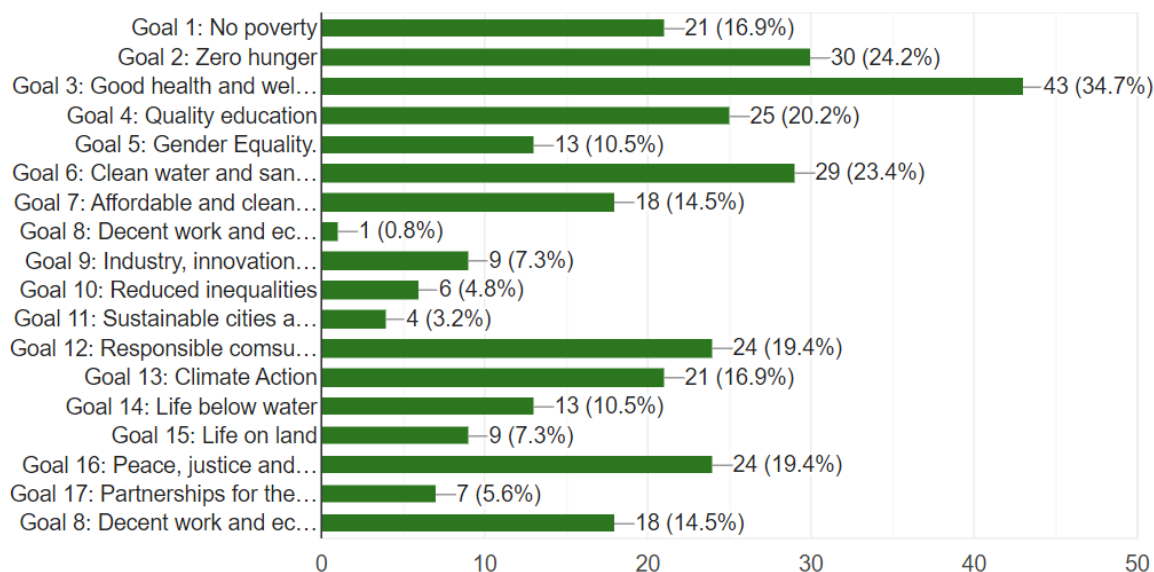
As an example, the study Improving Knowledge about the Sustainable Development Goals through a Collaborative Learning Methodology and Serious Game, conducted by the University of the Basque Country by Saitua-Iribar, A., Corral-Lage, J., & Peña-Miguel, N. published in 2020 is noteworthy, where the vast majority of surveyed students acknowledged not having had contact with the Sustainable Development Goals.

Students were asked, in a multiple-choice question, to indicate, from their perspective and considering their personal motivations, a maximum of three of the most important sustainable development goals.

We can categorize the responses into three categories. The first category includes those goals with a perceived low importance by respondents, with a response percentage below 10%. The second category encompasses goals considered highly relevant by respondents, with a response percentage exceeding 20%. The third category comprises goals with a response percentage between 10 and 20%, perceived as important but not outstanding by the respondents.

6. PERSONAL: Thinking about YOURSELF and your PERSONAL motivations. Which 3 Sustainable Development Goals do you think are the most important? PLEASE CHOOSE ONLY 3:

124 responses



In the first category, the low perceived importance that students attribute to Sustainable Development Goals 10: Reduce inequalities, and Goal 11: Sustainable Cities and Communities stands out.

In the second category, the goals 3: Good Health and Well-being, and 2: Zero Hunger stand out for their perceived level of importance. One possible interpretation of these results is that the students, due to their limited prior knowledge about the Sustainable Development Goals, tend to respond by referring to goals that are easier for them to understand or imagine.

In the third category, we find goals such as 12: Responsible Consumption and Production and 6: Clean Water and Sanitation.

However, based on the results and considering that there have been 124 responses, we cannot conclude that there is a goal perceived by a large majority as representative. It is noteworthy that the goal of health and well-being has been pointed out in 43 of the responses, which may be a consequence of the varied nature of the students' majors or the lack of general information about the Sustainable Development Goals in the academic environment in the year 2021.

In view of the dispersion of the data, other studies have been consulted, in this case, those conducted by experts from government administrations and universities. The detailed

information can be found at this link (<https://www.sdgsinorder.org/>) and it is observed that the results obtained vary significantly for some of the Sustainable Development Goals.

The most relevant finding in this study is related to the goal "Reduce Inequalities," which, surprisingly, is considered one of the least important from the students' perspective. This viewpoint simply reinforces the hypothesis of students' lack of knowledge about the meaning of each of the goals and the specific measures they propose.

Additionally, it is noteworthy that the goal perceived as most important by students, "Health and Well-being," is considered of medium importance by the experts. This adds another layer of complexity to the interpretation of these results. Consequently, these findings suggest the need for a more in-depth approach to students' understanding and awareness of the Sustainable Development Goals and their implications.

The following table includes the information about the expert average score, you can find the full document in the following link (<https://www.sdgsinorder.org/goals>)



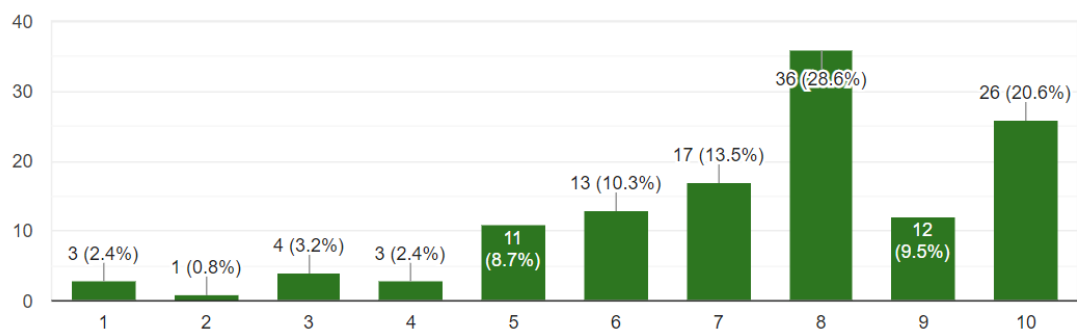
Respondents were asked to rate, on a scale of 1 to 10, how important it would be to include training on the Sustainable Development Goals (SDGs) in their fields of study. While the majority of responses were affirmative, the results do not demonstrate a unanimous conviction about the necessity of incorporating SDG training.

A response of 8 or higher was obtained in 59% of the responses, and 32% provided a response between 5 and 7, which could be interpreted as indifferent. In this regard, students might view the incorporation of SDGs into their curricula positively, yet they may not consider it indispensable.

Lastly, approximately 9% of respondents do not find it important to include SDG training in their study plans. Once again, it is suggested that the lack of prior training among the surveyed students has influenced the obtained responses.

8. On a scale from 1 - 10, how IMPORTANT do you find the 17 UN Sustainable Development Goals within your field of study?

126 responses



Consulted on a scale from 1 to 10 about their motivation to receive training on the Sustainable Development Goals (SDGs) in their fields of study, respondents showed a predominantly positive response, though possibly with a slightly lower level of interest. Approximately 42% of the responses indicated motivation equal to or greater than 8, while 47% responded in the 5 to 7 range. This distribution could be interpreted as a neutral stance; students may view the inclusion of SDGs in their curricula favorably but may not consider it indispensable.

Finally, around 11% of the respondents do not consider it important to receive training on the SDGs in their study plans. This percentage is slightly higher than the one obtained when inquiring about the importance of incorporating the SDGs' outcomes.

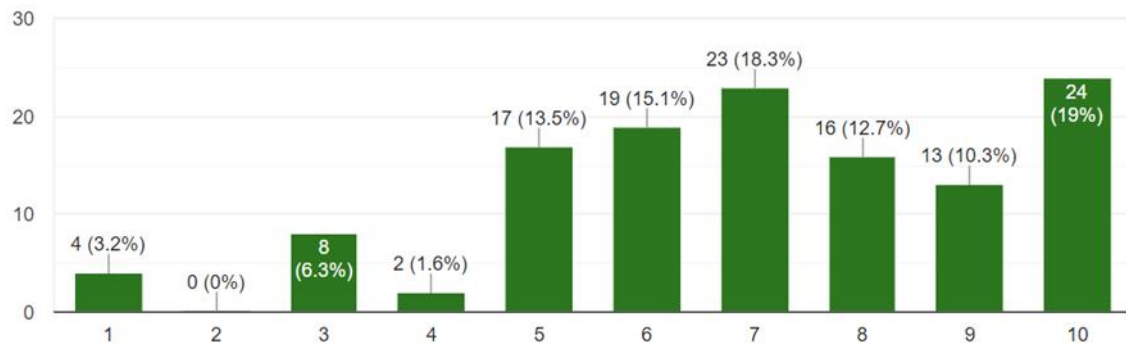
It is suggested again that the lack of prior training among the surveyed students has influenced the obtained responses. Furthermore, it is highlighted that these students are

sometimes very focused on acquiring knowledge applicable to their professional work or hard skills, occasionally downplaying the importance of transversal skills.

Additionally, in light of the results, there is a reinforced need to incorporate training on the Sustainable Development Goals into the contents of vocational education.

9. On a scale from 1 - 10, how MOTIVATING do you find it to work with the 17 UN Sustainable Development Goals within your field of study?

126 responses



4. Companies Perspective

The scope of companies has been different. Some logistics have been interviewed, but also from XABEC companies with experience in other fields

YSAO:

Number of Companies Interviewed: 5

Employee Range: Between 12 and 320 employees

Industry Focus:

- Log transport
- Mining transport and logistics
- Public transport
- Cargo transport
- Earth moving and road surveillance

XABEC:

Number of Companies Interviewed: 4

Employee Range: Between 25 and 325 employees

Industry Focus:

- Art of goods (e.g., food, medical, human)
- Facilities management / Energy services
- Auxiliary services to the maritime transport of containers
- Distributor of refrigeration equipment for transport
- Leading provider of turnkey refrigeration systems and services to the food distribution industry

TEC:

Number of Companies Interviewed: 3

Associated Organization: TUR

All the participating companies were asked 5 questions

1. According to stakeholders / companies, the current most important sustainability challenges within the sector are (including the reasons behind):

The key conclusions and main ideas were:

A. Quality Education:

- Difficulty in finding experienced and committed employees.

B. Responsible Consumption and Production:

- Challenges in being a responsible consumer in the mining industry.
- Difficulty in obtaining good prices in bidding competitions, particularly for a large forest company.
- Bidding competitions becoming increasingly difficult.
- Challenges in implementing sustainable practices in road maintenance, with customers expecting more results with less money.
- Necessity for environmental sustainability in facility maintenance, driven by upcoming increases in electricity costs.
- Challenges in logistics, focusing on efficiency in deliveries and reducing consumption while adhering to regulatory requirements.
- Continuous adaptation to industry requirements, especially in terms of energy consumption and the use of non-polluting refrigerants.

C. Climate Action:

- Concerns about the environmental impact of big machines in the mining transport and logistics industry, especially their high consumption of fossil fuels.

D. Industry Innovation and Infrastructure:

- Infrastructure challenges, including inadequate roads and the need for immediate financial investments.
- Difficulties in investing in biofuels and electric vehicles due to low activity prices.
- The challenge of ensuring economic profit when green solutions are costly.

E. Energy Efficiency and Consumption Control:

- Energy production, efficiency, and consumption control identified as major challenges.
- Lack of innovative solutions to utilize the last waste, especially after it has been delivered to animal parks and inns/special homes.

F. Legislation and Product Challenges:

- Impact of changing legislation, both in the Danish and foreign markets, on products.
- Challenges related to shortages of raw materials aligned with legislation banning certain products.

We include the companies answers

YSAO1 - Quality education, It's hard to find employees which are experienced and ready commitment. Responsible consumption and production; It's not easy to be responsible consumer in mining industry.

Climate action; Big machines consumes lot of fossils fue. (Mining transport and logistics).

YSAO2 - Responsible consumption and production. It's hard to get good price a big forest company in bidding competition. New kind of vehicle technology is hard to get invested because competition is so hard.

YSAO3 - Industry innovation and infrastructure. Roads and roadinfrastructure are painless and need more money immediately. Responsible consumption and production. Biofuels and electricity vehicles are hard to invest, because prices of activity is so low.

YSAO4 - Quality of education. It's hard to find good people. Responsible consumption and production. Bidding competition are more and more difficult.

YSAO5 - Responsible consumption and production. Bidding competition are more and more difficult. New challenges to notice environment and people road maintenance. Customer waits more results with less money. It's hard to think all those sustainable things then.

XBC1 - As a company dedicated to the maintenance of facilities, it is necessary to be more environmentally sustainable and it is relevant to control the different energy consumption, much more since June 1, when there will be an increase in the cost of electricity

XBC2 - As a logistics company, the main challenge is efficiency in deliveries and in reducing consumption, which means greater activity and cost reduction. Respecting regulatory requirements at all times

XBC3 -The biggest challenge for companies in the sector is the almost constant adaptation to the requirements of the companies, in addition to being increasingly efficient in energy consumption and in the use of non-polluting refrigerants

XBC4 - The most important challenges are energy production, energy efficiency and consumption control.

Another great challenge is to find qualified profiles and the constant training of workers in new ways of working, new materials and new ways of obtaining energy.

TEC1 - How to ensure enough economic profit when green solutions are costly. When the municipality authorities choose to do renovation themselves. Political announcements lacking red threats / logics. Combustions systems. DK the only country where you cant tank LNG. Welfare system is built on taxes / charges. There is a strong story about "environmenal pigs" within the transportation sector which is not fair. Not always the most efficient solutions - there is a lot of political correctness. Reality check is needed.

TEC2 - Within waste management sector there is a long tradition of recycling valuable material. But now there are more sorting of fractions than before. Today only quick silver which cannot be fractioned / isolated. 2; Green zones in larger cities with emission limitations. 3: Electric cars within public transportation (municipalities eg)

TEC3 - Energy heavy transport forms based on fossil fuel.

Elimination of item disposal (foodwaste). The capacity of non polluting energy forms is very limited and cannot live up to today's needs.

Lack of innovative solutions to make use of last waste - after there have been delivered to animal parks, herberger (Inns / special homes)

TEC4 - Legislation: Based on the product side, it is the changing legislation, on the Danish market and the foreign market. Products: The challenge lies in the raw materials which will be a shortage in line with legislation banning certain products.

2. According to stakeholders / companies, these initiatives or trends have had the most positive impact within the sector of T&L during the last 5 years?

Conclusions and Main Ideas:

A. Health and Well-being:

- Leading cultural change to prioritize employee happiness and health.
- Increased female participation in the mining business.

B. Decent Work and Economic Growth:

- Emphasis on human rights sections within the sector.

C. Responsible Consumption and Production:

- Introduction of new machines and work quality improvements.
- Awareness of environmentally friendly practices.
- Focus on fuel consumption, with driving speed identified as a significant factor.
- Positive impact from the appearance of new refrigerants.
- Greater sensitivity to energy efficiency.
- Adaptation of the offer in response to changing legislation.

D. Industry, Innovation, and Infrastructure:

- Advancements in technology, including machine control, road intelligence, and digitalization.

E. Positive Climate Initiatives:

- Implementation of Coop's climate strategy for climate neutrality by 2030.
- Investment in photovoltaic systems, electric trucks, LED lighting, and energy-friendly refrigeration.
- Optimization of route planning for goods deliveries.

F. Waste Management and Electric Vehicles:

- Tradition of recycling valuable material in the waste management sector.
- Implementation of green zones in larger cities with emission limitations.
- Introduction of electric cars in public transportation.
- Transition from fossil fuel to more CO2-friendly cars.

We include the companies answers

YSAO1 - A Good health and well-being; Leading cultural change, leading people want keep employees happy and well-being. Gender quality; Last 5 years, there are coming lots of female to mining business. Responsible consumption and production; New machines, Changes to better work quality, less to useless and unnecessary work.

YSAO2 - Decent work and economic growth. There are in congrats some kind of human rights sections.

YSAO3 - Responsible consumption and production. Being more knowing in state of being environmentally friendly.

YSAO4 - Responsible consumption and production. Fuel consumption is more and more bigger thing. Driving speed is huge impact fuel consumption and tire wearing.

YSAO5 - Industry, innovation and infrastructure. Technologis is taking huge steps last past years. Like machine control, road intellingence an so. Digitalization is there!

XBC1 - Yes, especially the appearance of new refrigerant, the greater sensitivity for energy efficiency and the adaptation of the offer

XBC2 - Adapted vehicles. New types of refrigerants. Changing legislation

TEC1 - Within waste management sector there is a long tradition of recycling valuable material. But now there are more sorting of fractions than before. Today onlu quick silver which cannot be fractioned / isolated. 2; Green zones in larger cities with emission limitations. 3: Electric cars within public transportation (minucipalities eg)

TEC2 - Coop's climate strategy of being climate neutral in 2030 has already led to many positive initiatives such as investment in one of Denmark's largest photovoltaic systems, which i.a. supplies Coop's first electric truck for heavy goods transport in urban environments with power for battery charging. Establishment of photovoltaic systems at Coop's stores has also been initiated.

In addition, replacement of all light sources for LED, automatic switching off of lights in all empty rooms, purchase of 24 electrically powered vans for delivery of goods from Coop.dk/mad, replacement of energy-intensive refrigeration and air compressors for more energy-friendly models, optimization of route planning of goods deliveries to save as many kilometers driven as possible.

TEC3 - Change of fossil fuel to more CO2 friendly cars

3. What do the stakeholders / companies need from the schools / training centres in order to further support a sustainability agenda within the sector?

Conclusions and Main Ideas:

A. Emphasis on Quality Education:

- Across responses, there is a consistent emphasis on the importance of quality education.
- Recognition of the need for education on new technologies and digitalization.

B. Workforce Qualifications and Training:

- There is a recognized need for qualified profiles in the workforce.
- Emphasis on training in renewable energies, energy efficiency, and new technologies.
- Prioritization of technicians with qualifications.

C. Sustainability and Green Solutions:

- The importance of sustainability and green solutions is highlighted.
- Advocacy for branding certain sectors as opportunities for working on sustainability.
- Recognition of the need for sorting materials and linking it to customer benefits.

D. Future Workforce Requirements:

- Anticipation of higher educational requirements in the future.
- Language and writing/reading skills are considered essential for active participation in company development.
- Focus on innovation and education as key areas for the future workforce.

Conclusions:

- Education, particularly in new technologies, is crucial for the workforce.
- Qualifications in renewable energies and sustainability are seen as essential.
- The future demands a higher level of education and a focus on innovation and language skills in the workforce.

We include the companies answers

YSAO1 - Quality education; Responsible consumption and production; "internal entrepreneurship".

YSAO2 - Quality education.

YSAO3 - Quality education. More public transport education. Hope of age demands reductions in law.

YSAO4 - Quality of education. More education about new technology and digitalization.

YSAO5 - Quality of education. Help of taking all that digitalization to care and hand.

XBC1 - Need for qualified profiles. Training in renewable energies and energy efficiency

XBC2 - Technicians with qualifications

XBC3 - Qualified technicians. Training for employees in new technologies

XBC4 - Skilled apprentices and worker training on new refrigerants. Adequacy to the regulations. Training in renewable energies

TEC1 - The schools might brand eg the cargo / truck sector as a possibility for working for sustainability / green solutions.

TEC2 - Share materials so that more people can use it.

TEC3 - Work with sorting of materials - the link to the costumers. "whats in it for them"

TEC4 - Education of innovative thinking individuals as a whole in courses in sustainable development will understand the context that a massive need for development must be based on an economically realistic achievable level.

I think in the future there will be a higher requirement for the simple employee's level of education, as well as skills in language, writing / reading. To be able to be an active share in the company development in the field of innovation. So short Innovation + education will be a focus area in the future.

4. Describe dilemmas when it comes to strengthening the sustainability agenda within the sector of Logistics and Transportation

Main Ideas and Conclusions:

- A. **Employee Commitment:** Emphasized the importance of employees' commitment to follow the agenda consistently.
- B. **Challenges with New Generations:** Suggested challenges in working with new generations, indicating potential difficulties in collaboration or work dynamics.
- C. **Adapting to New Challenges:** Raised questions about managing new challenges such as choosing between electricity or gas trucks, and the impact of digitalization, especially in a cargo company.
- D. **Financial Sustainability:** Expressed concerns about financial sustainability, highlighting the challenge of obtaining funds for development while ensuring a livelihood.
- E. **Efficiency and Sustainability in Facilities:** Focused on adapting facilities for greater efficiency and incorporating less polluting elements.
- F. **Dilemmas in Encouraging Principles:** Discussed the dilemma of encouraging principles in the logistics sector, where some actions are challenging to implement and must be economically profitable.
- G. **Competitiveness in Logistics:** Identified the competitive nature of the logistics sector, emphasizing the demands of deadlines and economic competitiveness.
- H. **Balancing HVAC Installations:** Emphasized the challenge in HVAC installations, where balancing cost-effectiveness, efficiency, regulatory requirements, and evolving technology is crucial.
- I. **Economic Challenges in Transportation:** Highlighted economic challenges in the transportation sector, where the high cost of electrical trucks poses a dilemma for companies striving for economical profit.
- J. **Lack of Development in Sustainable Energy:** Pointed out the lack of massive development in energy-efficient fuel options, creating a gap in meeting the need for sustainable energy.
- K. **Challenges with Qualified Personnel:** Identified the significant challenge of securing qualified personnel, essential for companies to keep up with developments.

Conclusions:

- Challenges span various aspects, including employee commitment, generational dynamics, financial sustainability, facility adaptation, and the balance of economic profitability with principles.
- The logistics and transportation sectors face dilemmas related to principles, competitiveness, and economic viability.

- HVAC installations require a delicate balance between various factors, and there is a need for the development of sustainable energy options.
- The availability of qualified personnel is crucial for companies to cope with the evolving landscape.

We include the companies answers

YSAO1 - Employees commitment to follow agenda all the time.

YSAO2 - New generations of people are not so good to work.

YSAO3 - -How we can manage all those new challenges. Electricity or gas trucks? Digitalization? (Cargo company = 14 employees)

YSAO4 - Where the get all those money, that we can be inside development, but also get some money to live! (Earth moving company)

YSAO5 - Adapt the facilities to make them more efficient. Incorporation of less polluting elements.

XBC1 - The main dilemma is which principles to encourage. There are some who show actuations that are already in place in FULTON, although there are others for whom it is difficult to put them into practice. In addition, the application of the principles must be economically profitable.

XBC2 - A dilemma in the logistics sector is the demands of deadlines and that it is a very competitive sector economically

XBC3 - Being competitive in costs and time

XBC4 - HVAC installations have to combine cost effectiveness, efficiency, regulatory requirements with fast-moving technology. We understand that there is a great challenge in finding that balance

TEC1 - Economically there are some great challenges. Electrical trucks cost mio - the incitament of the companies is firstly to ensure economical profit in order to make sense as a company. So how can this go hand in hand? Also: There is a risk that it becomes more a competetion of branding yourself on some easy ways instead of doing the right things.

TEC2 - There is a lack of massive development of energy-efficient fuel options that can adequately meet our need for sustainable forms of energy.

TEC3 -I think the biggest challenge is if you can not get qualified personnel, so we the simple company have a hard time keeping up.

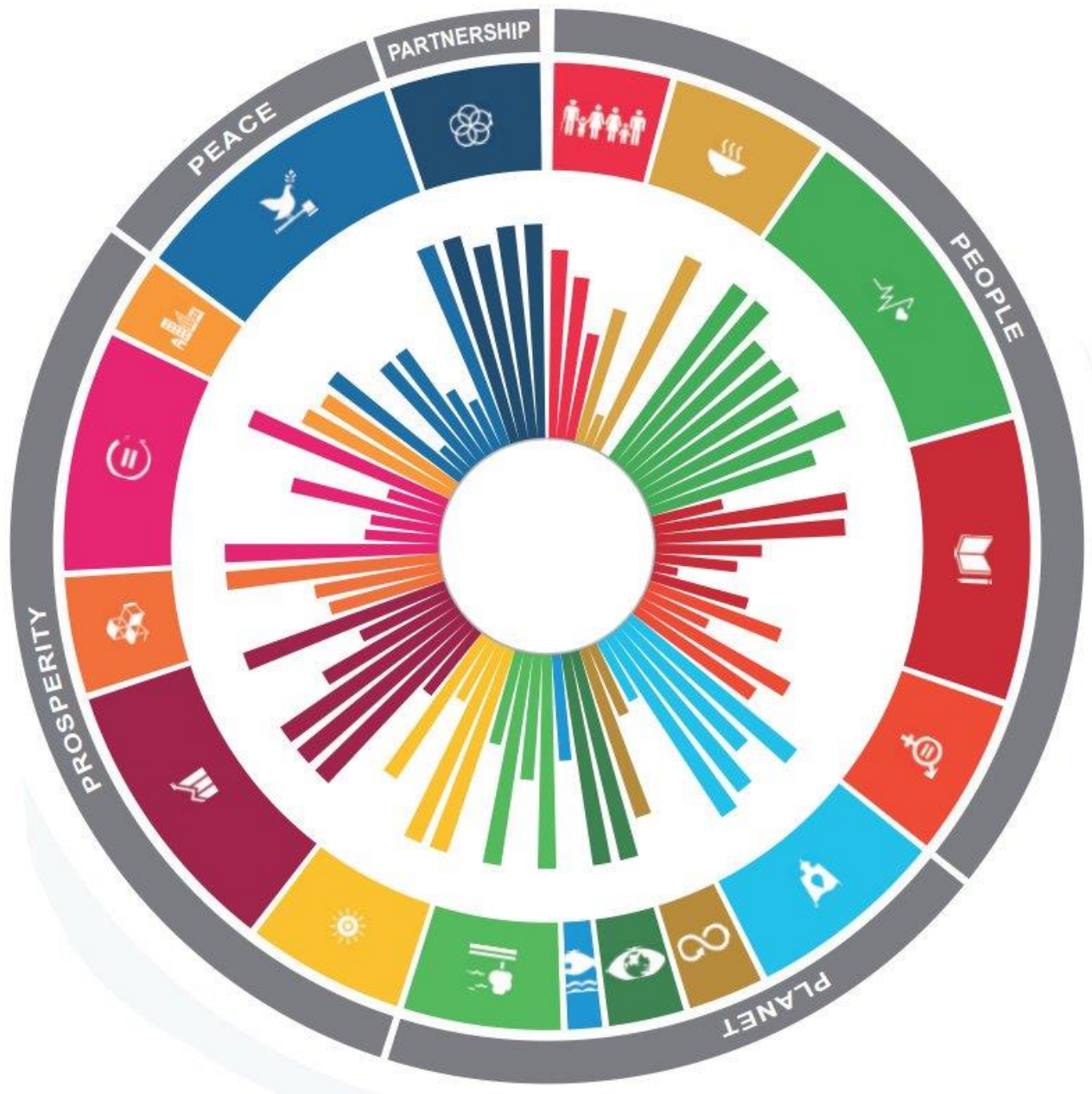


Ilustración 1 Where are the OCDE countrys – OCDE twitter Account

5. How does the stakeholder / company describe the value / reflect on working with UN Sustainable Development Goals (SDGs)

Main Ideas and Conclusions

- A. Sustained Commitment:** Companies express a sustained commitment to enhancing sustainable practices and strengthening the implementation of Sustainable Development Goals (SDGs).
- B. Current Sustainable Practices:** Active engagement in current sustainable practices, including technology adoption, safety measures, and environmental considerations, is evident.
- C. Continuous Improvement Focus:** Emphasis on continuous improvement, with companies striving to do their best, upgrade equipment, and learn from industry peers.
- D. Opportunities in SDGs:** SDGs are viewed as opportunities, particularly in responsible consumption, affordable energy, and long-standing practices aligned with sustainability.
- E. Holistic Sustainability Approach:** Recognition of the importance of a holistic approach, embracing principles of equality, quality work, and collaboration for educational improvements.
- F. Environmental Contribution:** Acknowledgment of SDGs as a means to contribute to environmental improvement, beyond economic considerations.
- G. Market Value and Branding:** Market value considerations include the importance of advertising and branding, aligning with sustainable values for employees and the broader market.

Overall Impression:

- Companies collectively demonstrate a positive inclination toward sustainable development, emphasizing continuous improvement and a holistic understanding of the multifaceted benefits of sustainable practices.

We include the companies answers

YSAO1 - There are important and necessary. And we want strengthen use of SDGs on our company.

YSAO2 - We are doing best whart we can. New trucks, service regularly, seeing environment load, safety in work.

YSAO3 - We do what we can. Try to follow other to do our best in all area.

YSAO4 - We'll do our best. We try change trucks to newer ones ang get some training to our employees.

YSAO5 - It's hard to say. We try to do what we can in all day doing.

XBC1 - Principles such as responsible consumption and affordable and non-polluting energy are an opportunity for companies like them that have been working on it for years

XBC2- The companies sometimes work to achieve the objectives, and probably a first step is to recognize this work. In addition to being energy efficient, as has been commented in other questions, we are currently working to promote principles of equality, quality work, and in the case of companies that host trainees, helping to improve the quality of education, bringing closer the business world to schools.

XBC3 - Working on the sustainable development goals, it should not be seen only as an opportunity to be more economically profitable, but to help improve the environment that surrounds us

XBC4 - Energy efficiency and control of consumption are lines of action in which the company has been working for a long time. We understand that the achievement of the 2030 objectives is a great opportunity and it would be interesting to assess the relevance of working on some other principle and not only on those more related to the company,

TEC1 - The UN's 17 global goals create awareness of our own need for development that can shift consumer / business behavior towards also approaching the UN's 17 global goals.

TEC2 - There are different values:

Mirroring effect: here the simple employee can reflect in the company's green approach to everyday life, and is motivated by this.

It is also a must for some new employees, and if companies do not have a green profile, they may not be able to attract the necessary manpower.

TEC3 - Market value: It can be used in terms of advertising and create a good branding.

6. COVID19: Has the current COVID19 situation influenced the ways the companies / stakeholders look upon this? In which ways does it influence them?

Main Ideas and Conclusions

- A. Diverse Impacts of COVID-19:** Responses highlight the diverse impacts of the COVID-19 situation, with some industries experiencing significant disruptions while others demonstrate resilience.
- B. Emphasis on Employee Well-being:** The pandemic has underscored the importance of prioritizing employee health and well-being across various sectors.
- C. Operational Adaptability:** Companies have demonstrated adaptability and vigilance in responding to the challenges posed by the pandemic, implementing changes such as spacing preparations and online trade.
- D. Market Shifts and Resilience:** Some sectors have experienced shifts in market focus, indicating a capacity to adapt and realign strategies to navigate the evolving business landscape.

E. Limited Impact on Essential Services: Essential services, such as cargo transportation and earthmoving, have maintained stability, emphasizing their critical role in sustaining daily life, even during challenging times.

These conclusions reflect the multifaceted nature of the impact, the focus on employee welfare, adaptability in operations, market shifts, and the resilience of essential services.

We include the companies answers

YSAO1 - Good health and well-being in more more important our company and we want serve that - our employees.

YSAO2 -It's being reducing sales and business.

YSAO3 - Not very much. Cargo is still moving, and people need to live.

YSAO4 - Last summer earthmoving sector was little bit silent us usual. But now everything is almost fine.

YSAO5 - Not very much. Lot of work, we are very carefully that employees don't contact each other without reason.

XBC1 - Different preparation of spacing in public buildings, in special hospitals

XBC2 - No

XBC3 - No

TEC1 - Online trade - there has been a disruption for Danish carriers (fragtmænd). Before they didnt care about the small packages but only focused on the big ones. But now theyve moved their interest - because of the new market

7. Conclusions and external information

Businesses play a crucial role in advancing Sustainable Development Goals (SDGs), as highlighted in the PwC report "SDG Reporting Challenging 2018". The most prioritized SDGs for businesses include:

1. Decent Work and Economic Growth (SDG8):

Targets focus on economic productivity, safe working conditions, technology upgrading, and innovation. Businesses are encouraged to reduce the proportion of youth not in employment, education, or training.

2. Climate Action (SDG13):

Involves reducing carbon emissions, mobilizing financial resources, and promoting climate change-related planning in the least developed countries. Companies can commit to Affordable Clean Energy (SDG7) and implement energy-efficient programs.

3. Responsible Consumption and Production (SDG12):

Companies are directed to substantially reduce waste generation through prevention, recycling, and reuse. Large companies are urged to adopt sustainable practices and integrate sustainability into reporting cycles.

4. Good Health and Wellbeing (SDG3):

Healthcare and pharmaceutical companies prioritize targets related to diseases, while automobile, insurance, and technology companies contribute to reducing global deaths and injuries from road traffic accidents. Focus on preventing non-communicable diseases and promoting mental health is highlighted.

5. Industry, Innovation and Infrastructure (SDG9):

Encourages the development of sustainable and resilient infrastructure supporting economic development. Financial services can support small-scale enterprises in developing countries, and technology companies are urged to increase access to information and communications technology.

The report emphasizes that businesses, by fully respecting human rights, can contribute significantly to realizing SDGs. Collaboration across sectors is crucial to address global challenges, including climate change, resource depletion, demographic shifts, and corporate governance, while increasing awareness of SDGs in Ireland. While businesses cannot achieve SDGs alone, they play a pivotal role in providing finance, driving innovation, and promoting economic growth and employment.

72%

of companies mention the SDGs in their annual corporate or sustainability report. But just 19% mention the Goals in CEO or Chair statements.



Base: All companies (729)
Source: PwC, SDG Reporting Challenge 2018

QUESTIONS	ANSWER	ANSWER	ANSWER	ANSWER
2: Describe the stakeholders and external partners from the sector of Logistic and Transportation involved in this data-collection	FULTON - https://www.fulton.es/	Intercontainer https://www.intercontainer.es/	Hwasung thermo http://www.hwasungeu.com/	Carrier https://www.carrier.com/commercial/es/es/
Describe here:	>12.000.000		>2.000.000	>45.000.000
- Indication of size of company (Number of employees / annual turnover EURO)	>325 employees	>100 employees	>25 employees	>65
- Art of goods (eg food, medical, human)	Facilities management Energy services	Auxiliary services to the maritime transport of containers	Distributor of refrigeration equipment for transport	Leading provider of turnkey refrigeration systems and services to the food distribution industry
- Historicity (New / old?)	50 years	40 years	30 years (10 in Valencia)	100 years
3: This is how we collected the data (Interview / survey / other)	Interview	Interview	Interview	Interview
4: According to stakeholders / companies, the current most important sustainability challenges within the sector are (including the reasons behind):	Adapt the facilities to make them more efficient. From FULTON they are already working on it. Incorporation of less polluting elements. As a company dedicated to the maintenance of facilities, it is necessary to be more environmentally sustainable and it is relevant to control the different energy consumption, much more since June 1, when there will be an increase in the cost of electricity.	As a logistics company, the main challenge is efficiency in deliveries and in reducing consumption, which means greater activity and cost reduction. Respecting regulatory requirements at all times	The biggest challenge for companies in the sector is the almost constant adaptation to the requirements of the companies, in addition to being increasingly efficient in energy consumption and in the use of non-polluting refrigerants	The most important challenges are energy production, energy efficiency and consumption control. Another great challenge is to find qualified profiles and the constant training of workers in new ways of working, new materials and new ways of obtaining energy.
5: According to stakeholders / companies, these initiatives or trends have had the most positive impact within the sector of T&L during the last 5 years?	-	Yes, especially the appearance of new refrigerant, the greater sensitivity for energy efficiency and the adaptation of the offer	Adapted vehicles. New types of refrigerants Changing legislation	-
6: What do the stakeholders / companies need from the schools / training centres in order to further support a sustainability agenda within the sector?	Need for qualified profiles. Training in renewable energies and energy efficiency	Tecnicians with qualifications	Cualified technicians. Training for employees in new technologies	Skilled apprentices and worker training on new refrigerants. Adequacy to the regulations. Training in renewable energies
7: Describe dilemmas when it comes to strengthening the sustainability agenda within the sector of Logistics and Transportation	The main dilemma is which principles to encourage. There are some who show attitudes that are already in place in FULTON, although there are others for whom it is difficult to put them into practice. In addition, the application of the principles must be economically profitable.	A dilemma in the logistics sector is the demands of deadlines and that it is a very competitive sector economically	Being competitive in costs and time	HVAC installations have to combine cost effectiveness, efficiency, regulatory requirements with fast-moving technology. We understand that there is a great challenge in finding that balance
8: How does the stakeholder / company describe the value / reflect on working with UN Sustainable Development Goals (SDGs)	Principles such as responsible consumption and affordable and non-polluting energy are an opportunity for companies like them that have been working on it for years	The companies sometimes work to achieve the objectives, and probably a first step is to recognize this work. In addition to being energy efficient, as has been commented in other questions, we are currently working to promote principles of equality, quality work, and in the case of companies that host trainees, helping to improve the quality of education, bringing closer the business world to schools.	Working on the sustainable development goals, it should not be seen only as an opportunity to be more economically profitable, but to help improve the environment that surrounds us	Energy efficiency and control of consumption are lines of action in which the company has been working for a long time. We understand that the achievement of the 2030 objectives is a great opportunity and it would be interesting to assess the relevance of working on some other principle and not only on those more related to the company,
9: COVID19: Has the current COVID19 situation influenced the ways the companies / stakeholders look upon this? In which ways does it influence them?	Different preparation of spacing in public buildings, in special hospitals	No	No	Different preparation of spacing in public buildings, in special hospitals

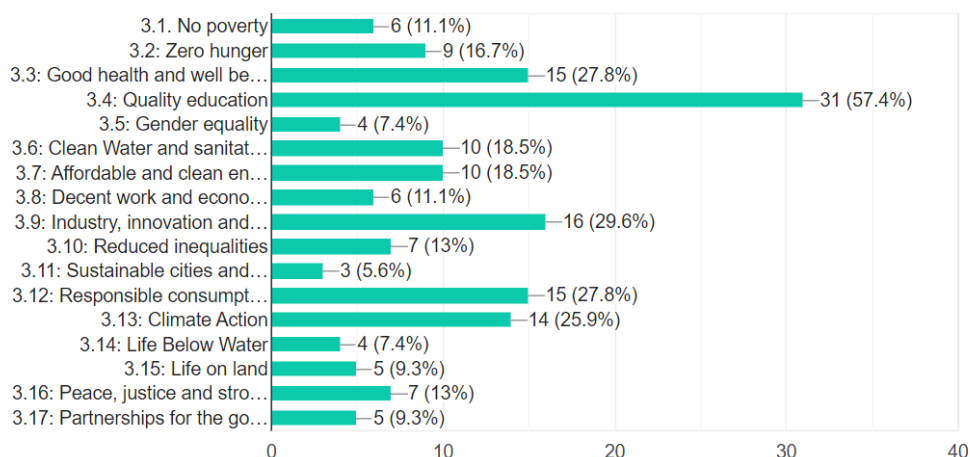
QUESTIONS	ANSWER 1	ANSWER 2
2: Describe the stakeholders and external partners from the sector of Logistic and Transportation involved in this data-collection		
Turnover (€)	217.000.000€	-
Number of employees	320	12
Art of goods (eg food, medical, human)	Mining transport and logistics	Log transport
Historicity (New / old?)	-	-
3: This is how we collected the data (Interview / survey / other)	Interview	Survey
4. According to stakeholders / companies, the current most important sustainability challenges within the sector are (including the reasons behind):	Quality education, It's hard to find employees which are experienced and ready commitment. Responsible consumption and production; It's not easy to be responsible consumer in mining industry. Climate action; Big machines consumes lot of fossils fuel.	Responsible consumption and production. It's hard to get good price a big forest company in bidding competition. New kind of vehicle technology is hard to get invested because competition is so hard.
5: According to stakeholders / companies, these initiatives or trends have had the most positive impact within the sector of T&L during the last 5 years?	A Good health and well-being; Leading cultural change, leading people want keep employees happy and well-being. Gender quality; Last 5 years, there are coming lots of female to mining business. Responsible consumption and production; New machines, Changes to better work quality, less to useless and unnecessary work.	Decent work and economic growth. There are in congrats some kind of human rights sections.
6: What do the stakeholders / companies need from the schools / training centres in order to further support a sustainability agenda within the sector?	Quality education; Responsible consumption and production; "internal entrepreneurship".	Quality education.
7: Describe dilemmas when it comes to strenthening the sustainability agenda within the sector of Logistics and Transportation	Employees commitment to follow agenda all the time.	Look answer number 4
8: How does the stakeholder / company describe the value / reflect on working with UN Sustainable Development Goals (SDGs)	There are important and necessary. And we want strengthen use of SDGs on our company.	We are doing best whart we can. New trucks, service regularly, seeing environment load, safety in work.
9: COVID19: Has the current COVID19 situation influenced the ways the companies / stakeholders look upon this? In which ways does it influence them?	Good health and well-being in more more important our company and we want serve that our employees.	Not very much. Lot of work, we are very carefully that employees don't contact each other with out reason.

ANSWER 3	ANSWER 4	ANSWER 5
4.000.000€	3.900.000€	3.800.000€
55	14	26
Public transport	Cargo transport	Earth moving and road surveillance
-	-	-
Survey	Interview	Interview
Industry innovation and infrastructure. Roads and road infrastructure are painless and need more money immediately. Responsible consumption and production. Biofuels and electricity vehicles are hard to invest, because prices of activity is so low.	Quality of education. It's hard to find good people. Responsible consumption and production. Bidding competition are more and more difficult.	Responsible consumption and production. Bidding competition are more and more difficult. New challenges to notice environment and people road maintenance. Customer waits more results with less money. It's hard to think all those sustainable things then.
Responsible consumption and production. Being more knowing in state of being environmentally friendly.	Responsible consumption and production. Fuel consumption is more and more bigger thing. Driving speed is huge impact fuel consumption and tire wearing.	Industry, innovation and infrastructure. Technology is taking huge steps last past years. Like machine control, road intelligence and so. Digitalization is there!
Quality education. More public transport education. Hope of age demands reductions in law.	Quality of education. More education about new technology and digitalization.	Quality of education. Help of taking all that digitalization to care and hand.
New generations of people are not so good to work.	How we can manage all those new challenges. Electricity or gas trucks? Digitalization?	Where the get all those money, that we can be inside development, but also get some money to live!
We do what we can. Try to follow other to do our best in all area.	We'll do our best. We try change trucks to newer ones and get some training to our employees.	It's hard to say. We try to do what we can in all day doing.
It's being reducing sales and business.	Not very much. Cargo is still moving, and people need to live.	Last summer earthmoving sector was little bit silent as usual. But now everything is almost fine.

4. Teachers Perspective

3. Below you see the 17 UN Sustainable Development Goals - the SDGs. Please mark the 3 most relevant SDGs for your teaching

54 responses



A survey involving 54 teachers was conducted to analyze their perspective on the Sustainable Development Goals (SDGs). The unanimous response highlighted SDG 4, focusing on quality education, as the most relevant. It is crucial to note that this choice may be influenced by the specific condition of the respondents.

Delving into the objectives considered most important for teaching activities, two key aspects were identified. Firstly, SDG 9 (Industry and Innovation) emerged as a significant area of interest, emphasizing the importance of integrating industrial and innovative concepts into education. Secondly, SDG 12 (Responsible Consumption and Production) stood out, highlighting the need to promote sustainable practices in the educational context.

An interesting finding was that goals such as Sustainable Cities, Life Below Water, and Equality of Opportunity were perceived as less relevant in teaching activities. This discovery suggests specific areas of focus to enhance the integration of these SDGs in education.

It is noteworthy that SDG 3, focusing on well-being, was considered already incorporated into regular teaching activities, both by teachers and students. This perception underscores the importance assigned to well-being in the educational environment and highlights the shared relevance between educators and students in this specific aspect of the SDGs.

5. Managers Perspective

Conclusions from the Survey

1. Awareness Building is Crucial:

- 31% of teachers express a need for more information on SDGs.
- 60% believe they have a good understanding, emphasizing the importance of strengthening awareness among teachers and students.

2. Implementing SDGs in Educational Programs:

- Circular economy, sustainable transport, waste management, renewable energies, and related subjects are already integrated into partner schools' programs.
- Collaboration with industries on topics like quality and environmental impact in the logistics chain, energy-efficient driving, and workplace assessments is emphasized.

3. Sustainability in Organizational Development:

- Some schools have implemented sustainability initiatives, including LED lighting, solar cells, electric cars, and waste sorting.
- Challenges noted in implementing sustainable practices, such as expensive and complex waste sorting.

4. Motivation Among Teachers Varies:

- Approximately 25% of teachers are considered frontrunners.
- Limited understanding of sustainability, with some associating it only with organic products or finding sustainability changes as a loss.

5. Legislation as a Driver for Change:

- Current legislation serves as a significant driver for sustainable changes, especially concerning transportation laws.
- Schools are compelled to update their vehicle fleets due to new laws, influencing their sustainability efforts.
-

6. Next Steps and Action Plan:

- Emphasis on structured efforts to integrate sustainability across subjects.

- Prioritizing sustainability in projects, development activities, and agendas.
- Webinars and workshops to enhance awareness, including collaboration with other schools.
- Appointing a lead within the team to drive sustainability initiatives.

7. Sustainability as a Competitive Parameter:

- Uncertainty about sustainability as a competitive advantage, especially in the storage and logistics sector.
- Recognizing the importance of securing a "License to Operate" and maintaining future market positions.

8. Partnerships and Cooperation:

- Changing levels of engagement in sustainability partnerships among partner schools.
- Focus on exchanging experiences, implementing Global Goals, regulatory needs for technicians, and teacher internships in companies.

9. Supporting Companies:

- Larger companies prioritize sustainability, while middle-sized ones focus on profit and continuity.
- Need for upskilling in SDGs and climate-related competencies.
- Challenges in keeping pace with the sustainable transformation, requiring state support and political will.

10. Global Cooperation with ClickOn Climate:

- Recognizing the potential of global cooperation, seeking inspiration, and sharing learnings with teachers from other countries through initiatives like ClickOn Climate.

Interview 1 and 2 - XABEC

1a: Describe y Development of content on renewable energies, the educational Curriculum is not enough. Measurement of parameters to control consumption our role and responsibilities within your organization:	
Head of the Heating and cooling Department.	Head os studies for blended learning
1b: Personal background / profession / former work experiences:	
Industrial Engineering Participant in KA2 about Energy Transition (2019)	Agricultural engineer Participant in a KA2 about methodology Participant in a KA2 about VR
1c: According to you: What are the most important issues right now for the department and the school, when it comes to supporting the sustainability agenda within your department?	
Development of content on renewable energies, the educational Curriculum is not enough. Measurement of parameters to control consumption	
Part 2: The Staff – skills, training, motivation <i>When you think of your staff, what do you think about:</i>	
2a: <u>The motivation</u> of the teachers to teach sustainability within their professional field? Do you experience some challenges in relation to the motivation of the staff when it comes to implementing sustainable agenda into the teaching	
The motivation is very high. The industrial cooling sector is subject to constant modifications and teachers must be updated. More efficient equipment and non-polluting fluids are incorporated into teaching	
2b: Regarding the <u>skills of the teachers and staff</u>: How would you describe the challenges / possibilities?	
The challenges that are detected occur in training in new technologies, new ways of working and new fluids	
2c: In your experience: How do the <u>teachers and students</u> respond to the <u>subjects of sustainability</u>? Do they have the right competencies to do it? What do you think about the upskilling of the staff within the sustainability agenda?	
Aligning with the objectives of sustainable development and being more efficient in energy production and control of spending have more than obvious consequences for	

companies. The close relationship to the work world of teachers and students makes it easy to show those skills as necessary	
2d: What would be the <u>next step for you as a manager</u> in order to strengthen further the training within sustainability agenda at your department?	
Better use of resources Study of solutions prioritizing the most durable option Teacher training .	
2e: In <u>comparison with the other departments at your school</u>, where would you place your department on a 1-10 scale when it comes to focusing on sustainability agenda?	
The heating and Cooling Department is most focused in sustainability goals in the school	
Part 3: Cooperation with companies and stakeholders - and their needs	
3a: How do you <u>work together with companies and stakeholders</u> about the sustainability agenda? (Describe specific projects and initiatives? Small / Large scale? Which concrete topics or local agendas?)	
It is priority, the training of company workers according to the new regulatory requirements. Training for students according to the needs that companies transmit to teachers. Teacher training with stays in companies	
3b: Looking at the collaboration with companies and stakeholders: How would you describe the <u>current needs</u> from their side? Describe examples from specific companies / organisations:	
The most obvious current need has been further training in fluorinated refrigerants. Another aspect that is of great interest is the demand for qualified profiles and training in the area of renewable energies. Similarly, the demand for training is relevant to measure different parameters and thereby be able to carry out predictive maintenance and control consumption.	
3C: How do you see the possibilities for your school / department to support a stronger focus on sustainability within the sector of Logistics – and Transportation? And what are the challenges?	
At XABEC we have a relationship with logistics companies that work with refrigerated containers, we think that an opportunity to unite air conditioning, energy efficiency and	

logistics can be to work on content to train in this type of refrigerated vehicles. The main challenge is to show medium-sized small businesses the benefits of adopting a change in focus towards sustainability	
3D: How important do you think the <u>sustainability agenda</u> is as a competitive parameter for your school? Why / Why not?	
Without a doubt the sustainable development goals are important for the school and will make the students more competitive. Objectives such as the 11th for responsible production and consumption and the 7th for affordable and non-polluting energy, are perfectly aligned with the degrees taught by Xabec. As indicated above, a profitability approach will make it attractive for companies to host trained technicians, who will inevitably generate interest in students	
Part 4: ClickOn Climate project and current situation	
4a: What do you see as your main target from participating in “ClickOn Climate”?	
The main Target will be the companies, that will have a cascade effect in the student and the attractive og energy transition	
4b: Where would you like to put your focus within the department? (Transportation / logistics / other)?	
Energy efficiency	
4c: In what ways do you experience that <u>Covid19</u> influences the discourse of sustainability in the field of logistics and transportation on a local level around your school?	
I can not see how	
4d: What are the <u>main risks</u> in a project like “ClickOn Climate	
Do not develop contents relevant for companies. Show energy efficiency as a relevant topic for the students	
Part 5: The institutional / building / facility management at the partner schools:	
5a: Describe to which extent your department and / or the school as such implements sustainability when it comes to things like eg. energy, water, heating, handling of material, use of fuel etc.	
5b: <u>About monitoring.</u> Which tools are you using to report / monitor eg. greenhouse gas emissions or other emissions?	

Part 6: Sustainability – prioritization and contextual factors	
6a: When looking at the 17 Sustainability goals – which ones do you see as <u>the most relevant</u> for you to work with locally at your department? Why?	
7. AFFORDABLE AND CLEAN ENERGY 9. INDUSTRY, INNOVATION AND INFRASTRUCTURE 12. RESPONSIBLE FOR PRODUCTION AND CONSUMPTION.	
6b: What are your reflections about the <u>linkage between efficiency, economical value and the sustainability agenda</u> within your department?	
During the previous questions I have clear that there are only two ways to promote sustainability goals in the companies: legislation and proving that they reduce costs promoting sustainability. So, let's train the trainees to reduce costs with efficient energy contents	
6c: <u>Conflicts of interest</u>: Do you see any dilemmas or conflicts when working with the sustainability agenda in relation to other agendas as eg the strengthening of efficiency and economic or social value?	
Not at all, the key will be to show the companies that sustainability it is profitable in long term,	
Part 7: A look into the “sustainability within the training programs”.	
Which dimensions of sustainability within the sector of Logistics and Transportation are included to your training programs?	
(Checklist for the interviewer): <u>For instance: (READ and mark the relevant)</u> <ul style="list-style-type: none"> • Economic viability (1^a) • Responsibilities defined for safety, environmental and quality issues • Goals set for safety, environmental and quality issues • Risk management 	

- | | |
|---|--|
| <ul style="list-style-type: none"> • identification and management of key risks • Competence management • training plan in terms of professional qualifications • Conformity, condition and maintenance of equipment (3^a) • Emergency instructions and reporting, emergency instructions • Systematic data collection and analysis (2^a) • Regular summary on safety, environment and quality <ul style="list-style-type: none"> • measures to improve safety and promote social responsibility • Continuous development of responsibility | |
|---|--|

EUC SYD - INTERVIEW 1.

Part 1: Introduction

1a: Describe your role and responsibilities within your organization:

I am responsible for the education, training and retraining of Logistics – and Transportation educations in the south of Denmark. I hold a position as division chair.

1b: Personal background / profession / former work experiences:

I am educated as a primary school teacher and have worked as such for several years. The most of my working life I have worked as a school principal and department head at a vocational school.

I am also Diploma of Leadership.

1c: According to you: What are the **most important issues** right now for the department and the school, when it comes to supporting the sustainability agenda within your department?

1: Sustainability incorporated into the organization

2: Implementation of sustainability in our educations

3: To make sustainability a real value in the organization

Part 2: The Staff – skills, training, motivation

When you think of your staff, what do you think about:

2a: **The motivation** of the teachers to teach sustainability within their professional field? Do you experience some challenges in relation to the motivation of the staff when it comes to implementing sustainable agenda into the teaching?

Yes!

If sustainability is not a value that makes sense to you, you are not making it a priority. I find that many of our employees do not see sustainability as an overriding value. They can see the long-term values, but not the effect of short-term changes when we talk about sustainability. They feel something is being taken from them.

2b: Regarding the **skills of the teachers and staff:** How would you describe the challenges / possibilities?

Our teaching staff has a relatively old age. This means that many of them are resistant to change. At the same time, they are very loyal and flexible when we have to solve difficult and complex tasks.

2c: In your experience: How do the **teachers and students respond to the subjects** of sustainability? Do they have the right competencies to do it? What do you think about the upskilling of the staff within the sustainability agenda?

First and foremost, I think both our teachers and students have sufficient knowledge about sustainability. It's about making sustainability relevant to them. That can be very difficult when you are living in a country with a high standard of living and a welfare society that provides you rich opportunities. In relation to continuing education when we talk about the sustainability agenda, I think it is obvious to follow a development that benefits our lives and welfare

2d: What would be the **next step for you as a manager** in order to strengthen further the training within sustainability agenda at your department?

Put it on all our agendas in our work, which we already do for the majority of our meetings in our own organization and with external partners.

2e: In **comparison with the other departments at your school**, where would you place your department on a 1-10 scale when it comes to focusing on sustainability agenda?

7

Part 3: Cooperation with companies and stakeholders - and their needs

3a: How do you **work together with companies and stakeholders** about the sustainability agenda? (Describe specific projects and initiatives? Small / Large scale? Which concrete topics or local agendas?)

Many of our partners work on the sustainability agenda. The problem is that we have not reached the same level. Therefore, many of the initiatives are about exchanging experiences.

We share knowledge about:

Organization of teaching.

Knowledge shared using sustainable fuels until the transition to the use of renewable energy fuels.

Exchange of experience in teaching sustainability.

The work of implementing the Global Goals.

Etc.

3b: Looking at the collaboration with companies and stakeholders: How would you describe the **current needs** from their side? Describe examples from specific companies / organisations:

The challenges are mentioned.

It is about everyone taking responsibility for the change. It requires leadership and organizational tools.

Not all companies have the courage to carry out such a major revolution.

Many companies have forced the conversion to have trucks that run on electricity. It requires financial muscle and readiness. The development is not in place either

Not all companies can keep up at the same pace.

Therefore, state support is needed, but that requires political will.

Our politicians are in favor of major changes. But they do not agree on the pace at which it should proceed.

3C: How do you see the possibilities for your school / department to support a stronger focus on sustainability within the sector of Logistics – and Transportation? And what are the challenges?

We have a really good network and collaboration with other schools and the surrounding companies. Nationwide, we work 19 schools together with in the logistics- and transportation sector.

The challenge is that we cannot keep pace.

3D: How important do you think the sustainability agenda is as a competitive parameter for your school? Why / Why not?

It is not a question of why / why not. Nor is it a matter of competition. It is a question of whether we dare not.

Of course, competition can drive the importance of the agenda further, but can it convince us?

Part 4: ClickOn Climate project and current situation

4a: What do you see as your main target from participating in “ClickOn Climate”?

Reach out globally.

4b: Where would you like to put your focus within the department? (Transportation / logistics / other)?

I want to focus on our employees being able to work on the subject together with teachers from other countries.

4c: In what ways do you experience that Covid19 influences the discourse of sustainability in the field of logistics and transportation on a local level around your school?

Most of our educations are about performing tasks practically. It has not been possible and has had a major impact on student learning.

4d: What are the main risks in a project like “ClickOn Climate”?

As with all projects, they have an expiration date. What happens when we are done?

Part 5: The institutional / building / facility management at the partner schools:

5a: Describe to which extent your department and / or the school as such implements sustainability when it comes to things like eg. energy, water, heating, handling of material, use of fuel etc.

Our operation of the college building, transportation, waste handling, etc. are all undergoing close scrutiny and analysis to make we are making progress every year, i.e. reducing our carbon footprint and energy consumption a.s.o.

5b: **About monitoring.** Which tools are you using to report / monitor eg. greenhouse gas emissions or other emissions?

Tools reporting carbon footprint and energy consumption.

Part 6: Sustainability – prioritization and contextual factors

6a: When looking at the 17 Sustainability goals – which ones do you see as **the most relevant** for you to work with locally at your department? Why?

In teaching: all 17 SDGs – as they all are relevant as a way for our future mind set
In college operation: 3,4,5,6,7,8,9,12,13, as they are relevant for our target to be carbon neutral by 2029

6b: What are your reflections about the **linkage between efficiency, economical value and the sustainability agenda** within your department?

We seen them as interconnected and we base our work on UNESCO's 4 pillars: financial, environmental, social and cultural sustainability

6c: **Conflicts of interest:** Do you see any dilemmas or conflicts when working with the sustainability agenda in relation to other agendas as eg the strengthening of efficiency and economic or social value?

No.

Part 7: A look into the “sustainability within the training programs”.

Which dimensions of sustainability within the sector of Logistics and Transportaion are included to your training programs?

We work with a wide range of subjects that support the topic of sustainability.

E.g:

Quality and environment in the logistics chain

Oil and chemical waste

Tank transport - accident prevention

Energy-efficient driving

Workplace assessment, including assessing relevant working environment conditions.

(Checklist for the interviewer):

For instance: (READ and mark the relevant)

- Economic viability
- Responsibilities defined for safety, environmental and quality issues
- Goals set for safety, environmental and quality issues
- **Risk management**
 - identification and management of key risks
- **Competence management**
 - training plan in terms of professional qualifications
- Conformity, condition and maintenance of equipment
- Emergency instructions and reporting, emergency instructions
- Systematic data collection and analysis
- **Regular summary on safety, environment and quality**
 - measures to improve safety and promote social responsibility
- Continuous development of responsibility

EUC SYD - INTERVIEW 2

Part 1: Introduction

1a: Describe your role and responsibilities within your organization: Vice principal, with responsibility for: VET, Adult training, Internationalization and IT

1b: Personal background / profession / former work experiences: former teacher, MA & MBA

1c: According to you: What are the **most important issues** right now for the department and the school, when it comes to supporting the sustainability agenda within your department?

1: Sustainability in educational programs

2: Sustainability in organizational development

3: Digitalization

Part 2: The Staff – skills, training, motivation

When you think of your staff, what do you think about:

2a: **The motivation** of the teachers to teach sustainability within their professional field? Do you experience some challenges in relation to the motivation of the staff when it comes to implementing sustainable agenda into the teaching? *Many teachers are highly motivation*

2b: Regarding the **skills of the teachers and staff**: How would you describe the challenges / possibilities? *There is still a lack of key digital competencies*

2c: In your experience: How do the **teachers and students respond to the subjects** of sustainability? Do they have the right competencies to do it? What do you think about the upskilling of the staff within the sustainability agenda? *We are on track, but there will always be a constant demand for upskilling*

2d: What would be the **next step for you as a manager** in order to strengthen further the training within sustainability agenda at your department? *Make sure that sustainability is given priority in all our projects and development activities*

2e: In comparison with the other departments at your school, where would you place your department on a 1-10 scale when it comes to focusing on sustainability agenda? *Not relevant, as my responsibility covers all VET departments*

Part 3: Cooperation with companies and stakeholders - and their needs

3a: How do you work together with companies and stakeholders about the sustainability agenda? (Describe specific projects and initiatives? Small / Large scale? Which concrete topics or local agendas?) *EUC Syd is deeply involved in local partnerships with companies and municipalities. We have developed targeted training for e.g. craftsmen, building maintenance etc.*

3b: Looking at the collaboration with companies and stakeholders: How would you describe the current needs from their side? Describe examples from specific companies / organizations: They need upskilling in SDG's and climate related competencies

3C: How do you see the possibilities for your school / department to support a stronger focus on sustainability within the sector of Logistics – and Transportation? And what are the challenges? *This sector needs competencies in sustainable logistics and maintenance of new types of transportation e.g. e-mobility*

3D: How important do you think the sustainability agenda is as a competitive parameter for your school? Why / Why not? *It is very important for our college, secure our "License to Operate", i.e. we must secure our future market position*

Part 4: ClickOn Climate project and current situation

4a: What do you see as your main target from participating in "ClickOn Climate"? *Keeping a constant focus on sustainability*

4b: Where would you like to put your focus within the department? (Transportation / logistics / other)? *From my chair, it is important to focus on developing and secure competencies in all departments*

4c: In what ways do you experience that **Covid19** influences the discourse of sustainability in the field of logistics and transportation on a local level around your school? *That we cannot physically meet – the VET system is based on practical training*

4d: What are the **main risks** in a project like “ClickOn Climate? *That the long term effects are missing – what will happen when the project stops?*

Part 5: The institutional / building / facility management at the partner schools:

5a: Describe to which extent your department and / or the school as such implements sustainability when it comes to things like e.g. energy, water, heating, handling of material, use of fuel etc. : *Our operation of the college building, transportation, waste handling, etc. are all undergoing close scrutiny and analysis to make we are making progress every year, i.e. reducing our carbon footprint and energy consumption a.s.o.*

5b: **About monitoring.** Which tools are you using to report / monitor e.g. greenhouse gas emissions or other emissions? Tools reporting carbon footprint and energy consumption

Part 6: Sustainability – prioritization and contextual factors

6a: When looking at the 17 Sustainability goals – which ones do you see as **the most relevant** for you to work with locally at your department? Why?

- *In teaching: all 17 SDGs – as they all are relevant as a way for our future mind set*
- *In college operation: 3,4,5,6,7,8,9,12,13, as the are relevant for our target to be carbon neutral by 2029*

6b: What are your reflections about the **linkage between efficiency, economical value and the sustainability agenda** within your department? *We seen them as interconnected and we base our work on UNESCO's 4 pillars: financial, environmental, social and cultural sustainability*

6c: **Conflicts of interest:** Do you see any dilemmas or conflicts when working with the sustainability agenda in relation to other agendas as eg the strengthening of efficiency and economic or social value? No – see 6b

Part 7: A look into the “sustainability within the training programs”.

Which dimensions of sustainability within the sector of Logistics and Transportation are included to your training programs? *Economical and safe driving, new means of transportation*

TEC- INTERVIEW 1, 2 and 3

Part 1: Introduction

1a: Describe your role and responsibilities within your organization:		
Head of education	Head of education, chairman for the cooperation of transportation schools in Denmark. Working group regarding many of these things	Head of Building Department. Responsible for operation and maintenance of building stock, technology, consumption, service agreements, cleaning etc.
1b: Personal background / profession / former work experiences:		
10 years of experience within the vocational	Besides manager of the department of transportation. Trained driving instructor – used to be haulage contractor, driving instructor in the military. Furthermore: Worked as an instructor at MAN. Travelled around and taught enterprises about fuel consumption, 120 days a year.	Trained carpenter and building technician. Previously worked as project manager at TEC – Before TEC he worked at a drawing office, with a focus on renovation of non-profit housing construction.
1c: According to you: What are the most important issues right now for the department and the school, when it comes to supporting the sustainability agenda within your department?		
1: Awareness first – ensure that we have a common ground/understanding of the agenda – the teachers! Many in the field who do not find the sustainability agenda		1. Unintended consumption of electricity, water and heating – Technology, Ventilation – Things that are running when they are not supposed to 2. Making the right, environmentally

<p>interesting or relevant in private/professional settings.</p> <p>2: The field of transportation – TEC Hvidovre. Sustainable transportation, fuel, electric cars, ready for technicalities – Mortens department. Trucks that can no longer drive in the city – becoming obsolete. To update the car-package – truck-level. Polluting, big trucks banned due to restrictions in CPH area</p> <p>3: Bring sustainability into the teaching. There is a variety of courses – update the list / curriculum / teaching material.</p> <p>- Secondary gain – the students gain an understanding</p>		<p>conscious decisions – a lot of great initiatives but not powerful enough when it comes to investment</p> <p>3. Implement waste sorting at source – educate students and give them an understanding</p> <p>- Expensive – purchasing waste bins costs several millions. Significant increase in cleaning expenses. Not economically sustainable, but important step in an environmental perspective</p> <p>- Several municipalities and institutions have started doing it – a request from management</p> <p>- The ministry has made standard pictograms – creates uniformity. Paper, bio-waste etc.</p> <p>- Though it would become a requirement back in January</p>
<p>Part 2: The Staff – skills, training, motivation</p> <p><i>When you think of your staff, what do you think about:</i></p> <p>2a: <u>The motivation</u> of the teachers to teach sustainability within their professional field? Do you experience some challenges in relation to the motivation of the staff when it comes to implementing sustainable agenda into the teaching</p>		
<p>The teaching staff is out in the world – 25% learn it themselves, they are interested in it – 75% need to be pushed when it comes to setting an agenda of sustainability. There are some frontrunners, but not too many. They do not belong to the segment – no higher education / no high</p>		

<p>salary – the target group that does not usually show that side of themselves.</p> <p>Skills: Understanding of sustainability is maybe limited to organic eggs/milk – people who drive electric cars are seen as weird. Those who have come closest is renovation – they work with recycling eg.</p> <p>All courses should have a sustainability task for the students.</p>		
<p>2b: Regarding the <u>skills of the teachers and staff</u>: How would you describe the challenges / possibilities?</p>		
<p>Create knowledge – we have a very dynamic team, how can it be spread? Which kind of training should take place?</p> <p>Has to be planned in preparation for 2 years from now, so that there will be at least 1 sustainability task that can be worked with in all subject areas.</p>		
<p>2c: In your experience: How do the <u>teachers and students</u> respond to the subjects of sustainability? Do they have the right competencies to do it? What do you think about the upskilling of the staff within the sustainability agenda?</p>		
<p>2d: What would be the <u>next step for you as a manager</u> in order to strengthen further the training within sustainability agenda at your department?</p>		
<p>When we create an innovation camp then they just want to do</p>		

<p>it – green technology. We have the apparatus to control the agenda.</p> <p>Next step: A structured effort, making a themed afternoon, where we talk about how we can implement a sustainability task into all subject areas.</p>		
<p>2e: In comparison with the other departments at your school, where would you place your department on a 1-10 scale when it comes to focusing on sustainability agenda?</p>		
<p>Do not know where we are. I believe we have an innovative team, and are ready to act, but might not have enough knowledge. (3-4 on the scale). The goal could be that we are at an 8 when we are done with this project.</p>		
<p>Part 3: Cooperation with companies and stakeholders - and their needs</p>		
<p>3a: How do you <u>work together with companies and stakeholders</u> about the sustainability agenda? (Describe specific projects and initiatives? Small / Large scale? Which concrete topics or local agendas?)</p>		
<p>Nothing aside from this project – no formalized projects.</p> <p>There is a little bit with mechanic at the electric car workshops. Selections of webinars. It is in process</p>		
<p>3b: Looking at the collaboration with companies and stakeholders: How would you describe the <u>current needs</u> from their side? Describe examples from specific companies / organisations:</p>		
<p>3C: How do you see the possibilities for your school / department to support a stronger focus on sustainability within the sector of Logistics – and Transportation? And what are the challenges?</p>		
<p>3D: How important do you think the <u>sustainability agenda is as a competitive parameter</u> for your school? Why / Why not?</p>		

<p>A bit in doubt – TEC as an entity must be able to flash green educations, but in the storage- and logistics areas when it comes to competing. There is a lot of competition here (a lot of competition with trucks – private schools)</p>		<p>A sustainable course of action is a requirement for making a significant impact</p> <ul style="list-style-type: none"> - All businesses are subject to increasing requirements when it comes to taking a stand regarding the environment and sustainability – requirements that our students need to be familiar with and be able to work with when they go to the companies o Need to learn this at GF1 o Some students are very willing to do this, others do not think about it. We need to support those who care about the matter o Should be a natural thing at all locations – we can tell that some departments are not doing too well (Troels (colleague) is working actively with meeting the needs) o We have had some initiatives – purchased a bunch of plastic containers to separate miscellaneous things. Did not turn out as well as we had hoped. This came from the teaching staff.
<p>Part 4: ClickOn Climate project and current situation</p>		
<p>4a: What do you see as your main target from participating in “ClickOn Climate”?</p>		
<p>4b: Where would you like to put your focus within the department? (Transportation / logistics / other)?</p>		
<p>4c: In what ways do you experience that Covid19 influences the discourse of sustainability in the field of logistics and transportation on a local level around your school?</p>		
<p>The knowledge we have gotten from the businesses earlier is not relevant – therefore it is clear</p>		
<p>4d: What are the main risks in a project like “ClickOn Climate</p>		
<p>That it could be a project, which does not make sense, is not</p>		

being clarified – many teachers are a bit tired of projects.		
Celebration!		
Part 5: The institutional / building / facility management at the partner schools: 5a: Describe to which extent your department and / or the school as such implements sustainability when it comes to things like eg. energy, water, heating, handling of material, use of fuel etc.		
		<p>Implemented initiatives</p> <ul style="list-style-type: none"> - TEC's lightning has been switched to LED recently - Solar cells have been installed in Hvidovre – around 2100 km². 520 kWp are being produced, which corresponds to around 25 % of the energy usage at the location in Hvidovre - 6 charging stations for electric cars in Hvidovre - Purchased certified green energy in 21, 22, 23 and 24 <p>Started initiatives</p> <ul style="list-style-type: none"> - We have installed around 80 digital electricity meters at our locations, which track the usage of water, electricity and heating in real-time. Now information on usage is collected, and alarms will be set whenever unexpected consumption takes place. The meters give us the opportunity to see in which areas we should prioritize sustainable initiatives. o Some companies offer software with real-time tracking, which is what makes it interesting. Everything is connected to the internet. o Cooperating with "Min Energi 2". Supplies the software, while we buy the meters – a service agreement where they maintain the programs. o All meters have been installed but the alarms are not functional yet – the material work is done but the configuration is in progress - Separation of waste. In August, numerous garbage bins set up on common areas, hallways, entrance areas, as well as canteens and outdoor spaces. - TEC has purchased 5 electric cars for the staff to use - We are in the process of installing 6 additional charging stations in all of our locations <p>Intended initiatives</p> <ul style="list-style-type: none"> - Establishment of bio-waste disposers in the canteen kitchen

		<p>of the new HCØ building. All bio-waste will be grinded and transported to the nearest biogas plant. If this initiative is successful, it will be implemented at our other locations.</p> <ul style="list-style-type: none"> - In the process of installing solar cells on the buildings at our locations in Frederiksberg and Gladsaxe - Better separation of waste from our educational workshops. This initiative requires cooperation with the teachers at the places of education – needs can be diverse and we have come further at some locations than others. o Need students and teachers to respect metal-waste and not put it into a bag with all kinds of stuff. Some people in Hvidovre have initiated a dialogue: <ul style="list-style-type: none"> ☐ Better separation of garbage at the sites of education. Work closely with Uvs – big differences. Frederiksberg is doing fine, Hvidovre can be an issue (but this is a huge location) ☐ If there is only 1 container, and you have to walk very far, people might be tempted to dispose their garbage nearby ☐ From the bottom up – indication of requests to start something, if that is a request we will do it. ☐ There is a lot of money in metal-waste
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5b: **About monitoring.** Which tools are you using to report / monitor eg. greenhouse gas emissions or other emissions?

		<p>From the 1.1. We changed our energy agreement, so all of our electricity comes from renewable sources – we pay a little extra. We purchase some quotas green energy, and there is a corresponding quota that matches our usage. Earmark an estimated amount of energy which we then buy.</p> <p>We have had a very favorable energy agreement that expired.</p> <p>We have to keep our accounts up to date; including certificates that need to be deducted from our collective emission The solar cells will have an impact on this as well.</p>
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Part 6: Sustainability – prioritization and contextual factors

6a: When looking at the 17 Sustainability goals – which ones do you see as **the most**

relevant for you to work with locally at your department? Why?		
		The climate is what makes a difference in this context
6b: What are your reflections about the linkage between efficiency, economical value and the sustainability agenda within your department?		
<p>Competition parameters – TEC</p> <p>Effectivity / economic gain – motivates a specific kind of employee. If they have a fun job, there is a bigger satisfaction with learning.</p> <p>Career satisfaction is essential – a motor – they become self-producing when they have fun (the teachers).</p>		<p>We prioritize according to our economy – we would rather want to spend 100.000 wherever the gain is the largest. This is often related to the areas in which we save most money being those which have the biggest impact on the climate</p> <p>Still there are many places where we cannot get reasonable deductions for our investment. At the same time, it shows that we are not where we would like to be</p> <p>Waste separation at source – this will never be in our favor from an economic perspective</p>
6c: Conflicts of interest: Do you see any dilemmas or conflicts when working with the sustainability agenda in relation to other agendas as eg the strengthening of efficiency and economic or social value?		
<p>NO – Change is fun. Can seem drastic to some people. Daily routine. Relevance. That people do not have to think about this.</p>		<p>There can be the economic incitement that was mentioned before – and that will almost always be there. Generally, there are no conflicts of interest – Waste separation at source. We spend a lot of money</p> <p>2,7 mio. has been the cost for purchasing of garbage bins</p>

ZADKINE - INTERVIEW 1, 2 and 3

Part 1: Introduction

1a: Describe your role and responsibilities within your organization:	
1b: Personal background / profession / former work experiences:	
1c: According to you: What are the most important issues right now for the department and the school, when it comes to supporting the sustainability agenda within your department?	
<p>1: The impact of thinking in a circular economy. Profit isn't the most important issue anymore, but the combination with sustainability is.</p> <p>2: The use of routes of transport and the type of transport</p> <p>3: Awareness of sustainability not only for the profession of logistics / teaching (but also of the school. Important to learn how to implement it later – but also in your own school. (Eg: glasses / cups. Paper exchanged for digital platforms / sharing etc).</p>	
Part 2: The Staff – skills, training, motivation <i>When you think of your staff, what do you think about:</i>	
2a: The motivation of the teachers to teach sustainability within their professional field? Do you experience some challenges in relation to the motivation of the staff when it comes to implementing sustainable agenda into the teaching	
<p>It is still a step to take in the matter of awareness on the stg. At the moment we have a major in Sustainability, but this is only a small portion and it's given by 1 teacher. I think when the whole team is schooled in this, then the motivation will rise automatically. right now very formal – no passion / lack of meaningfulness (intrinsic motivation).</p> <p>Awareness: from by teachers will influence the students (potential)</p> <p>Relatively new school – only 6-7 years. Last 4 years merge of 2 locations, and the most important goals has been to maintain and get basic quality of education. Number one priority. When that is ok... Now in the phase where we can adapt the second layer: Awareness. 1: practical, basic needs. 2: Making the education richer, not only focusing on the professional – good citizenship / Of the world. Create awareness, including social studies.</p>	
2b: Regarding the skills of the teachers and staff : How would you describe the challenges / possibilities?	

<p>Starting to have from management layer, having webinars workshops with team of durability. Not only for this school – for all 11 colleges. Important it will be to: On the Agenda: Creation of awareness. Showing practical steps. Only possible if we make the connection with working field. Take the students out and Webinars / platforms to initiate the next level of knowledge of durability. They have the skills to teach, but you have to feel and understand the of the by heart. Important to have one person to take the lead eg. (Student ideas = win awards)</p>	
<p>2c: In your experience: How do the <u>teachers and students respond to the subjects</u> of sustainability? Do they have the right competencies to do it? What do you think about the upskilling of the staff within the sustainability agenda?</p>	
<p>2d: What would be the <u>next step for you as a manager</u> in order to strengthen further the training within sustainability agenda at your department?</p>	
<ul style="list-style-type: none"> - Point a lead within the team – (Anil) - Place on the agenda 	
<p>2e: In <u>comparison with the other departments at your school</u>, where would you place your department on a 1-10 scale when it comes to focusing on sustainability agenda?</p>	
<p>Part 3: Cooperation with companies and stakeholders - and their needs</p>	
<p>3a: How do you <u>work together with companies and stakeholders</u> about the sustainability agenda? (Describe specific projects and initiatives? Small / Large scale? Which concrete topics or local agendas?)</p>	
<p>Minus</p>	
<p>3b: Looking at the collaboration with companies and stakeholders: How would you describe the <u>current needs</u> from their side? Describe examples from specific companies / organisations:</p>	

3C: How do you see the possibilities for your school / department to support a stronger focus on sustainability within the sector of Logistics – and Transportation? And what are the challenges?
Sustainability is something that the bigger companies have on their agenda and already work Middle sized companies = more focusing on profit and continuity. (Surviving of Covid19!) Classical path, but they are open to possibilities – combined with sustainable means to their ends. Benefits are central.
3D: How important do you think the <u>sustainability agenda is as a competitive parameter</u> for your school? Why / Why not?
YES: Would be / could be. There are 3 schools offering the same programmes in logistics
Part 4: ClickOn Climate project and current situation
4a: What do you see as your main target from participating in “ClickOn Climate”?
?
To see at what level our colleagues in the other countries – to learn from them. Inspiration and share out learnings, reach same level as them. Also important for me that our students can see the awareness not only within their own region – but alså a global – change of mindset. Not only a small issue – or “far from me”, but a world wide issue. Hopefully students can work together on the same projects – would be motivating to go to school. Always interesting to work with people internationally. It adds to whatever you’re doing
4b: Where would you like to put your focus within the department? (Transportation / logistics / other)?
Recycling / Planning level (the school doesn’t have transportation / Theoretically teaching packaging from A-B) – you can keep in mind: What devices / vehicles / types of transportation.
4c: In what ways do you experience that <u>Covid19</u> influences the discourse of sustainability in the field of logistics and transportation on a local level around your school?
Catalysator for growth of logistic branch – grown a lot and more efficient

4d: What are the main risks in a project like "ClickOn Climate"	
Part 5: The institutional / building / facility management at the partner schools:	
5a: Describe to which extent your department and / or the school as such implements sustainability when it comes to things like eg. energy, water, heating, handling of material, use of fuel etc.	
5b: About monitoring. Which tools are you using to report / monitor eg. greenhouse gas emissions or other emissions?	
No yet	
Part 6: Sustainability – prioritization and contextual factors	
6a: When looking at the 17 Sustainability goals – which ones do you see as the most relevant for you to work with locally at your department? Why?	
6b: What are your reflections about the linkage between efficiency, economical value and the sustainability agenda within your department?	
6c: Conflicts of interest: Do you see any dilemmas or conflicts when working with the sustainability agenda in relation to other agendas as eg the strengthening of efficiency and economic or social value?	
Priority is not there yet – it is on the agenda. At the moment – developing the quality of education. Consolidation of that – and companies / maintenance of relationship with the working field.	
(What kind of quality in education is at the centre of focus right now?	
Mission / Vision: classical / tradition way now. Less focus on theory and more focus on the practical. Roadmap from A to B. transparent for students – where am I now – where am I going. Strategy – students take skills from their job / private life – use those skills and knowledge in their education. Demotivating to do the same thing again and again.	

Andesh: background in IT / Technology. Digital Didactics – environment, the “look and feel” we give to the environment. Gap between the childrens knowledge and Social studies – UN Millenium goals – and then sustainable goals.

Focusing on the support – coaching / students to LIKE the “Route of learning”.

Learning logistics= In your learning path all

“Just in time learning” – when you need the practical issue, it will come.

DON'T Focus on the student =

6. 9 Good practices teaching about SGD's

There are three main ways that you can include learning about the Sustainable Development Goals in your institution activities:

- a) Extending current curriculum topics,
- b) Adding specific SDG units
- c) Making connections to institution events, and national/global commemorations.

Here, we offered 9 recommendations to teach about the SDG in the regular curriculum.

Real-world Examples:

Integrate real-world examples and case studies related to each SDG. Showcasing tangible examples helps students understand the practical implications of these goals.

Multidisciplinary Approach:

Adopt a multidisciplinary approach, connecting SDGs to various subjects. Explore the interconnectedness of the goals and how they overlap with subjects like science, geography, economics, and more.

Interactive Activities:

Incorporate interactive activities, such as group discussions, debates, and projects. Encourage students to explore solutions to global challenges and express their thoughts on sustainable practices.

Guest Speakers:

Invite guest speakers, experts, or professionals working on sustainable initiatives to share their experiences. This provides students with valuable insights and real-world perspectives.

Global Perspective:

Foster a global perspective by exploring how different regions are tackling specific SDGs. Use multimedia resources to showcase diverse cultural approaches to sustainability.

Community Engagement:

Engage students in community-based projects that address local issues connected to SDGs. This hands-on approach allows them to see the direct impact of sustainable actions in their own communities.

Technology Integration:

Leverage technology to access online platforms, virtual field trips, and collaborative projects. Utilize interactive tools and simulations that simulate the impact of various decisions on sustainability.

Assessment through Action:

Implement assessment methods that involve actionable steps. Encourage students to propose and execute small-scale initiatives aligned with SDGs, and assess their impact over time.

Encourage Critical Thinking:

Develop activities that encourage critical thinking about the ethical, social, and environmental aspects of sustainability. Prompt students to question and analyze the implications of different choices.

Educators can create an enriching and impactful learning experience that equips students with the knowledge and motivation to contribute to a more sustainable future, but probably, the focus should be in the last good practices, the critical thinking.

Only if the stakeholders have this critical thinking, combining hard and soft skills, the learning will be totally acquired.