



Sustainability skills for HORECA  
(Aim2Sustain)

KA220-VET-81300B0F



# *Analysis of Sustainability Action Areas and Skills Requirements and Criteria in the HORECA Sector*

*Survey analysis report*

*Ver. 1 (June 2023)*



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## Context

*This report is prepared in the context of the project “Sustainability skills for HORECA / Aim 2Sustain“. It is a joint initiative of 7 partner organisations from 7 countries, co-funded by the ERASMUS+, sub-action KA220-VET Cooperation partnerships in vocational education and training.*

*The project was developed in response to the tendency of increasing interest and concern about sustainability among HORECA stakeholders – investors, owners, customers. Sustainability is the process that demands initiatives and understanding of how the HORECA sector can become more sustainable, not just environmentally but also socially and economically. Becoming more sustainable refers not only to making business operations more efficient and effective but also to staying relevant in the ever-evolving and competitive market and being able to respond to current and future market demands. Osnabrück Declaration 2020 (EC) identifies sustainability as one of the challenges to be addressed in VET and recognises the importance of education on sustainability. The studies reveal that sustainability is not a separate subject – it is embedded across all relevant learning areas; therefore, education on sustainability should be incorporated as a cross-curriculum priority across all curriculum areas.*

*The general aim of the project is to promote education on sustainability in the VET sector in order to develop the sustainability competence of hotel, restaurant, and catering (HORECA) employees, contributing to an overall sustainability strategy.*

*The specific objectives of the initiative include*

- *Identification of main sustainability action areas and skills requirements and criteria in the HORECA sector;*
- *Creation of appropriate teaching/learning content on sustainability topics in accordance with HORECA sector requirements.*
- *Building VET teachers’ capacity to teach sustainability for working life.*
- *Expanding students’ understanding of sustainable work culture in the HORECA sector.*
- *Ensuring a link between VET and HORECA labour market demands.*

*The partners plan to deliver the following tangible project outputs:*

1. *Guidelines for Sustainability as a Competence in HORECA.*
2. *Online Aim2Sustain learning space on sustainability in HORECA-related topics hosting Open Educational Resources (OERs). All materials will be available in the languages of the project consortium: Bulgarian, Dutch, Greek, Lithuanian, Polish, Portuguese and Spanish, as well as English.*
3. *Transnational dissemination conference.*

*The above-mentioned results would be of use for the direct target groups of the project:*

- VET providers, VET trainers, learners, and apprentices in the HORECA sector across Europe, indirectly including also other education providers, i.e. secondary schools and HEIs.
- HORECA sector employees.
- Associations, networks, social partners, and enterprises operating in the HORECA sector.

## **Aim and Objectives of the Survey**

*This report presents and discusses the results of a survey implemented simultaneously in all seven countries involved in the project implementation: Lithuania, The Netherlands, Poland, Greece, Spain, Portugal and Bulgaria. The main objective of the survey is to identify and assess the sustainability landscape and identify the status quo in which HORECA businesses operate, which would support the preparation of the first project output - The Guidelines for Sustainability as a Competence in HORECA.*

*The survey was intended to map the perspectives/ opinions of the representatives of two main target groups:*

- 1) *The business/ employers in the HORECA sector, from one side*  
and
- 2) *Representatives of the VET sector (administrative and teaching staff), preparing and implementing the educational programmes preparing the future employees of the sector from another side.*

*For the purpose of the survey, a research tool (questionnaire) was developed by the University of Aegean, with participation and contribution from all the rest of the partners.*

*The research methodology was adapted on the one hand for the design of the questionnaire by all Aim2Sustain partners, and on the other hand by the University of the Aegean (GR) for the distribution of the questionnaire and the analyses of the data collected.*

*The primary research of the Aim2Sustain project was carried out with the help of a prototype questionnaire whose development was based on Green Comp ([https://joint-research-centre.ec.europa.eu/greencomp-european-sustainability-competence-framework\\_en](https://joint-research-centre.ec.europa.eu/greencomp-european-sustainability-competence-framework_en))*

*The questionnaire was designed as a GoogleForm, structured in the following sections:*

- *An introductory part, informing the (potential) respondents on the research objectives, its context and the contact details of the researchers responsible for implementing the Aim2Sustain project in the particular country*
- *A section with Likert-type scales aimed to gather information about the main challenges which the respondents face in introducing and implementing sustainable practices in the everyday activities of their organisations*

- A section focused on the training needs of the employees in the sector consisting twenty-six Likert-type scales inviting respondents to identify main areas where human resources within the HORECA sector would require training to maintain sustainability.
- Other details defining the profile of the respondents (affiliation to VET or HORECA sector, specialisation, sector, years of experience, age, gender, completed level of education)

In Annex I is presented the place of this survey in the structure of the project, presenting a link to the next output, as well as well as the elements of the GreenComp<sup>1</sup>, which the research team used as a starting point for the identification of the research questions and structure of the survey tool.

The questionnaire was translated into the official languages of the countries, involved in the project and every partner distributed it among their network. The information collected is presented and discussed below.

## Results

### Lithuania

In Lithuania, the questionnaire was shared via e-mails with the partners in HoReCa sector and the staff in the VET center.

In total, 27 respondents filled in the questionnaire who fall into the following categories:

- Front line employee: 11
- Manager/Owner: 7
- VET center teaching staff: 4
- VET center administrative staff: 7

The majority of respondents were female: 81.5% (22) and 18.5% (5) were male.

The distribution of the respondents by sector is as follows:

- Hotels: 33.3% (9)
- Catering: 29.6% (8)
- Restaurants, cafes, bars: 22.2% (6)
- Vocational education: 14.8% (4)

Based on the responses, it seems that there is a general agreement on the importance of implementing sustainable practices in the HoReCa sector and 78% (21) of the respondents state they have ideas on how to do it. However, there are still challenges that need to be addressed in terms of the knowledge and skills of the human resources involved. This indicates that there may be a need for more education and resources to support the implementation of sustainable practices in the HoReCa sector.

Referring to the mentioned sustainability topics, that the human resources in the HoReCa sector need to be trained on, the respondents see them all as important or very important.

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<sup>1</sup>GreenComp: the European sustainability competence framework - [https://joint-research-centre.ec.europa.eu/greencomp-european-sustainability-competence-framework\\_en](https://joint-research-centre.ec.europa.eu/greencomp-european-sustainability-competence-framework_en)

In terms of specific sustainability practices, the respondents seem to place high importance on the use of sustainable and organic raw materials, and storage of raw materials as well as the reduction of waste and plastic consumption. There is also recognition of the importance of creating sustainable working conditions and protecting ecology and biodiversity in the sector.

In conclusion, the Guidelines for Sustainability as a Competence in HoReCa should highlight sustainability efforts in HoReCa that empower educators, trainers, and HoReCa professionals to adopt sustainable mindsets, lifestyles, and work practices.

## Greece

The researchers from the University of the Aegean distributed the questionnaire via Google Forms, email and social media. The research started on the 1<sup>st</sup> of April 2023 and completed on the 30<sup>st</sup> of April 2023 and for this period, 34 validly filled questionnaires were collected from Greek respondents. For the data analysis were used Descriptive statistics.

## Results

The following table presents the demographic profile of the research participants.

**Table 1. Demographic profile of the research participants**

Sex*		Age*		Sector*		Specialisation*		Experience (in years)*		Training*	
Man	55.8	18-25	11.8	Hotels	35.3	Reception	0	1-5	23.5	Primary education (compulsory)	2.9
Woman	41.2	26-30	5.9	Restaurants / Cafes / Bars	38.2	Reservations	5.9	6-10	11.8	School diploma	5.9
I don't want to answer	2.9	31-35	17.6	Catering	2.9	Waiting staff	26.5	11-15	23.5	VET School Diploma	29.4
<b>Category*</b>		36-40	17.6	Tourism VET education	20.7	Cook	14.7	15-20	8.8	Degree	17.6
Front line employee	44.1	41-45	14.7	Other: Airport	2.9	Bartender	5.9	21-25	11.8	Post-graduate Degree	44.1
Manager/Owner	20.6	46-50	8.8			Barista	14.7	26-30	17.6	Ph.D.	0
VET center teaching staff	35.3	51-55	17.6			Tourism VET education	14.7	31<	2.9		

VET center administrative staff	5.9	56-60	5.9			Administrative position	14.7				
Other	5.8	61<	0			Other:	2.9				

\*Percentages

The following table presents the results of the research in Greece.

**Table 2. Primary research results**

	Variables	Strongly Disagree*	Disagree*	Neither Disagree/Neither Agree*	Agree*	Strongly Agree*	Mean
<b>1.</b>	<b>Which are the challenges for implementing sustainable practices in the every-day activities in your organisation?</b>						
1.1	It is very expensive, and we cannot afford it at the moment.	8,8	17,6	29,4	<b>38,2</b>	5,9	3,1471
1.2	We do not have idea how to do it.	11,8	17,6	<b>38,2</b>	26,5	5,9	2,9706
1.3	We have idea, but we do not have the methodology.	2,9	17,6	29,4	<b>38,2</b>	11,8	3,3824
1.4	We are lacking skilled employees, who could do this.	8,8	11,8	11,8	<b>50,0</b>	17,6	3,5588
<b>2.</b>	<b>For sustainability to be preserved the human resources in the HoReCa sector need to be trained on the:</b>						
2.1	Implementation of quality assurance systems (HACCP, ISO 22000, ISO 9000).	2,9	5,9	2,9	<b>44,1</b>	<b>44,1</b>	4,2059
2.2	Importance of choosing animal-origin cooking raw materials produced on a sustainable way.	2,9	0	20,6	29,4	<b>47,1</b>	4,1765
2.3	Importance of choosing organic cooking raw materials.	5,9	2,9	14,7	35,3	<b>41,2</b>	4,0294
2.4	Importance of choosing plant-based cooking materials produced on a sustainable way.	0	8,8	17,6	26,5	<b>47,1</b>	4,1176
2.5	Importance of choosing traditional local cooking raw materials.	2,9	0	14,7	29,4	<b>52,9</b>	4,2941
2.6	Design of workplaces e.g., the kitchen lay out.	5,9	8,8	11,8	<b>35,3</b>	<b>38,2</b>	3,9118
2.7	Implementation of the sharing/collaborative economy.	2,9	5,9	<b>47,1</b>	35,3	8,8	3,4118
2.8	Implementation of zero waste programs.	2,9	0	0	44,1	<b>52,9</b>	4,4412
2.9	Preparation methods of cooking raw materials.	5,9	2,9	5,9	<b>44,1</b>	<b>41,2</b>	4,1176
2.10	Professional serving of drinks and food.	0	11,8	20,6	23,5	<b>44,1</b>	4,0000

2.11	Proper storage of cooking raw materials.	2,9	0	11,8	29,4	<b>55,9</b>	4,3529
2.12	Proper use of equipment.	0	2,9	2,9	32,4	<b>61,8</b>	4,5294
2.13	Proper use of the protective equipment.	2,9	11,8	2,9	26,5	<b>55,9</b>	4,2059
2.14	Importance of redesigning the distribution chain.	2,9	0	8,8	<b>52,9</b>	35,3	4,1765
2.15	Importance of reducing of the use of plastic consumables.	0	5,9	14,7	26,5	<b>52,9</b>	4,2647
2.16	Importance of respecting diversity.	2,9	2,9	11,8	32,4	<b>50</b>	4,2353
2.17	Selection of suitable suppliers of cooking materials.	5,9	2,9	17,6	32,4	<b>41,2</b>	4,0000
2.18	Strengthening of local gastronomy.	0	2,9	5,9	35,3	<b>55,9</b>	4,4412
2.19	Importance of using alternative/renewable energy sources.	0	2,9	8,8	32,4	<b>55,9</b>	4,4118
2.20	Importance of using environmentally friendly construction materials during the construction of the building facilities.	2,9	8,8	5,9	35,3	<b>47,1</b>	4,1471
2.21	Waste management.	2,9	0	0	32,4	<b>64,7</b>	4,5588
2.22	Waste recycling.	0	2,9	0	32,4	<b>64,7</b>	4,5882
2.23	Production and provision of safe services and products in the HoReCa sector.	2,9	0	11,8	35,3	<b>50</b>	4,2941
2.24	Creation of sustainable working conditions (protection of workers' physical and mental health) in the HoReCa sector.	0	2,9	8,8	20,6	<b>67,6</b>	4,5294
2.25	Resource protection and the transition to a low-carbon economy in the HoReCa sector.	2,9	5,9	8,8	35,3	<b>47,1</b>	4,1765
2.26	Protection of ecology and biodiversity in the HoReCa sector.	2,9	0	2,9	35,3	<b>58,8</b>	4,4706

\*Percentages

## Conclusions

The participants agree that:

- The implementation of sustainable practices is expensive, they do not know the implementation methodology of such practices and they lack the skilled employees that could do this.
- For sustainability to be preserved the human resources in the HoReCa sector need to be trained on the fields mentioned in the above table. An exception to that are the points 2.6 and 2.7.

## The Netherlands

The survey was sent via email to a randomly selected group of hospitality entrepreneurs from the region of The Hague (western part of The Netherlands) and



vocational teachers from the courses *Horeca & Facility Management* and *International Hotel & Management School*.

A total of 35 respondents from these two groups participated. Among the hospitality entrepreneurs group, the majority of respondents were managers or owners.

The 35 respondents include 25 men. Three-quarters of the respondents are between 41-60 years old. One-third work in a restaurant, café or bar. Also, about a third of the respondents work in education. Among the hospitality entrepreneurs and teachers, a third work in service and over a quarter work as cooks. A lot of hospitality experience is available; 29 respondents have between 15 and >31 years of experience. Almost two-thirds have Higher Vocational Education as their highest education. None of the respondents has pre-vocational secondary education.

### **Key challenges for integrating sustainability practices into daily work**

Based on the answers, it can be concluded that in integrating sustainability into daily practice in the hospitality industry, the biggest impact can be made by sharing exact knowledge with teachers and/or hospitality entrepreneurs and by training employees. When answering about the exact knowledge, it is not possible to find out whether these are teachers, hospitality entrepreneurs or both and how many.

**What should hospitality students be trained in to promote sustainability in the hospitality sector?**

### **Top 4 highest scores desired trainings for hospitality students**

		<b>Number of respondents with answer 'agree' or 'strongly agree'</b>
9.	<i>Preparation methods for cooking with fresh staples.</i>	32
22.	<i>Waste recycling</i>	32
21.	<i>Waste disposal</i>	31
8.	<i>Implementation of zero waste programmes.</i>	30

### **Training with a score of 29 respondents with answer agree + strongly agree**

5.	<i>Importance of choosing traditional local products.</i>
11.	<i>Proper storage of products.</i>
12.	<i>Proper use of equipment.</i>
14.	<i>Importance of making the distribution chain (logistics) more sustainable.</i>
19.	<i>Importance of using alternative/renewable energy sources.</i>
24	<i>Creating sustainable working conditions (protecting workers' physical and mental health) in the hospitality sector.</i>

### **Poland**

In Poland, different channels of distribution of the questionnaire have been used in order to reach the respondents. In the majority of cases, the project was presented to the potential respondents during either physical meetings or phone calls and

followed by the link to the questionnaire. Very helpful in this process were meetings with the Polish Touristic Society and Society of Alternative Education Wszechnica. Both have wide contacts with VET teaching and administrative staff and professionals with expertise in the HoReCa sector.

At the end, 30 questionnaires were collected in the following categories:

- Front line employee: 12
- Manager/Owner: 8
- VET center teaching staff: 7
- VET center administrative staff: 3

The majority of respondents were female: 56.7% (17) while the male accounted for 43,3% (13)

The age structure was the following:

- 18-25: 16,7% (5)
- 26-30: 20% (6)
- 31-35: 6,7% (2)
- 36-40: 13,3% (4)
- 41-45: 20% (6)
- 46-50: 10% (3)
- 51-55: 6,7% (2)
- 56-60: 3,3% (1)
- 61+: 3,3% (1)

As far as the sector is concerned, the majority of the respondents represented hotels, followed by restaurants, cafes and bars:

- Hotels: 43,3% (13)
- Restaurants, cafes, bars: 36,7% (11)
- Catering: 10% (3)
- Others: 10% (3)

The job functions were the following:

- Reception: 6
- Reservations: 7
- Waiters: 3
- Cook: 1
- Bartender: 3

When it comes to work experience, the group that was represented the most was respondents having between 6 and 10 years of experience:

- 1-5: 26,7% (8)
- 6-10: 36,7% (11)
- 11-15: 20% (6)
- 15-20: 10% (3)
- 21-25: 3,3% (1)
- 26-30: 0% (0)
- 31+: 3,3% (1)

*The training:*

- *School diploma: 33,3% (10)*
- *VET school diploma: 46,7% (14)*
- *Degree: 6,7% (2)*
- *Post-graduate degree: 13,3% (4)*

*The biggest challenge for the majority of the respondents (23) is the lack of skilled employees. Over half (16) of respondents think that implementation of sustainability strategies are expensive. 13 of them think that they don't have appropriate methodology and 9 that they don't have the idea about how to do it.*

*Analysis of the answers referring to training needs show that most of the topics included in the survey are very important but those that were chosen by 100% of respondents (30) are:*

- *Implementation of quality assurance systems (HACCP, ISO22000, ISO9000)*
- *Proper storage of cooking raw materials*
- *Proper use of equipment*
- *Waste management*
- *Waste recycling*
- *Resource protection and the transition to a low-carbon economy in the HoReCa sector*

*Several of respondents also commented that it would be beneficial to learn about how to prepare an overall sustainability strategy.*

## **Portugal**

*The strategy of our research team was to disseminate, by email, the questionnaire to the directors and focal points of the network of Turismo de Portugal schools to achieve our target groups: VET teaching and administrative staff and professionals with high levels of expertise in the HoReCa sector (Hotels, Restaurants, Catering).*

*We obtained a total of **35 responses** to the questionnaire divided into the following categories:*

- *Front line employee: 15*
- *Manager/Owner: 3*
- *VET center teaching staff: 10*
- *VET center administrative staff: 7*

*The tourism sector professionals who responded have the following **job functions/specialisation**:*

- *Reception: 5*
- *Reservations: 2*
- *Waiting staff: 1*
- *Cook: 6*
- *Bartender/ Barman/ Barwomen: 0*
- *Barista: 1*

**By sector:**

- Hotels – 28,6% (10)
- Restaurants, cafes, bars – 25,7% (9)
- Catering
- Others

**By sex:**

- 60% female (21)
- 40% male (14)

**By age:**

- 28,6% (10) – 41-45 years
- 20% (7) – 51-55 years
- 17,1% (6) – 46-50 years
- 11,4% (4) – 36-40 years
- 11,4% (4) – 31-35 years
- 5,7% (2) – 61+ years
- 2,9% (1) – 26-30 years
- 2,9% (1) – 18-25 years

**By training:**

- 31,4% (11) – Degree
- 28,6% (10) – School diploma
- 22,9 (8) – VET School Diploma
- 17,1% (6) – Post-graduate Degree

**By experience (in years):**

- 25,7% (9) – 21-25 years
- 22,9% (8) – 15-20 years
- 14,4% (5) – 6-10 years
- 11,4% (4) – 11-15 years
- 11,4% (4) – 1-5 years
- 11,4% (4) – 26-30 years
- 2,9% (1) – 31+ year

For most of the respondents (21) the **two key challenges** in implementing sustainable practices in the every-day activities in their organizations are mainly the **lack of appropriate methodology** and **lack of skilled employees** to implement sustainable practices.

The survey reveals that the **most preferred training needs** by the respondents are as follows:

- Waste recycling (26)
- Waste management (24)
- Implementation of zero waste programs (23)
- Importance of reducing of the use of plastic consumables (22)
- Strengthening of local gastronomy (22)

In conclusion, our **Guidelines for Sustainability as a Competence** should focus on creating a common methodology that enables both teachers/trainers and professionals of the HoReCa sector to think, live and work sustainably.

## Spain

The questionnaire has been distributed through the different HoReCa stakeholders of MEUS, among others, the questionnaire has been filled by:

HoReCaVET Centers:

- Folgado VET Center
- Valencia Culinary Center
- Cheste VET Center

HoReCa business

- Ca Maruco restaurant
- Jardines de Azahares big celebrations restaurant
- Novaterra Catering

AGE		GENDER		CATEGORY	
18- 25	2	woman	15	Teacher	10
26- 30	4	man	15	HoReCa Owner	13
31- 35	5			HoReCa Worker	7
36- 40	4				
41- 45	4				
46- 50	3				
51- 55	6				
56- 60	2				

Years of experience

6- 10	9
11- 15	11
15 - 20	2
21- 25	4
26 - 30	3
31+	1

SPECIALIZATION

Training	4
Cooking	9
Restaurant	
Management	2
Reservation	3
Reception	5
Waiter	5
Bar	2

In terms of identifying the key challenges for integrating sustainability practices in the every-day working activities, the respondents rank the challenges as follows:

*In terms of training needs analysis, the top-rated skills, identified by the Spanish respondents are:*

- *Proper use of equipment.*
- *Waste management.*
- *Recycling waste.*
- *Importance of practising sustainable logistics*
- *Selection of suitable suppliers of kitchen materials.*

## **Bulgaria**

*The survey tool (questionnaire) was shared with the network of partners entirely online - by sending emails to partner organisations and also posting a link to the survey on the official organisational website. The questionnaire was open for responses in April and the beginning of May 2023. As a result, 26 valid responses were collected.*

*Both target groups were well represented:*

- *19 respondents identify themselves as managers or employees in the HORECA sector*
- *9 respondents have teaching or administrative position in VET centres.*

*(there are 2 respondents, who declare to be involved in both fields - VET education and HORECA business)*

*Additionally, although groups with different levels of experience are represented, however, the majority of them are rather experienced professionals:*

- *From 1 to 5 years of experience - 4 respondents (15.4%)*
- *6-10 years of experience - 2 respondents (7.7%)*
- *11-15 years of experience - 7 respondents (29.6%)*
- *16-20 years of experience - 9 respondents (34.6%)*
- *21-25 years experience - 4 respondents (15.4%)*

*So, in the responses collected are rather based on experience and following the development of the industry over a longer period of time.*

*In terms of educational level, 42.3% of respondents have completed a bachelor's degree and another 34.6% hold a masters degree and only 23,1% of respondents have completed education for a VET diploma.*

*The key challenges which hinder the "green transition" of the sector, identified by the respondents, can be ranked as follows:*

1. *Lack of employees with relevant skills - 25 respondents (96%) declare to "agree" and "strongly agree" with this statement*
2. *Lack of financial resources to meet the costs/investments needed - 21 respondents (80%) declare to "agree" and "strongly agree" with this statement*
3. *Lacking information on how such transition could be implemented - indicated by 11 respondents*
4. *Having information, but lack of know-how - 9 respondents*

*In terms of the training needs the following topics are selected as most relevant:*

- *100% of the respondents strongly agree that the four topics about*
  - *Waste recycling,*

- Waste management,
- Importance of using alternative/renewable energy sources and
- Resource protection and the transition to a low-carbon economy in the HoReCa sector

shall have more attention in the training programmes of employees in the HORECA sector

- The topics of
  - Importance of reducing of the use of plastic consumables.
  - Importance of using environmentally friendly construction materials during the construction of the building facilities.
  - Protection of ecology and biodiversity in the HoReCa sector.
  - Importance of choosing plant-based cooking materials produced in a sustainable way.

Are also ranked very high - above 4.9 average score on a 5-level Likert scale.

In conclusion, might be stated that the representatives of the HORECA sector of both educational and business organisations indicate that better training of the employees in the field of sustainability is needed, focusing on topics such as waste management/reduction and recycling/, renewable energy, using environmentally friendly materials and raw materials produced in a sustainable way.

### **Summarised results for all countries**

In total, 217 responses were collected involving 88 respondents from the VET centres sector (on teaching and administrative positions) and 135 respondents from the HORECA business.<sup>2</sup> With this, the target indicator of 60 representatives of the VET sector and min 120 HORECA sector representatives has been reached.

**Main challenges “slowing down” the green transition of the sector** - from the summarised results of the Lickert scale, the main challenges can be ranked as follows:

1. Lack of employees with the necessary skills - 117, or 54%, respondents respond with “Agree” and “Strongly agree”
2. Unaffordable costs, connected with this - indicated by 81 respondents (or 38%) with “Agree” and “Strongly agree”
3. Having an idea for a green transition process but lacking a methodology - 78 respondents (or 36%) indicated that they “agree” and “strongly agree” with this statement

In terms of identifying the main training needs of the sector, although the results slightly differ from country to country, the top-rated topics, which need to be better developed in the training programmes are as follows:

1. Waste recycling
2. Waste management.

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<sup>2</sup> 6 respondents represent both - VET training institutions and the HORECA business.

3. *Implementation of zero waste programs.*
4. *Importance of using alternative/renewable energy sources.*
5. *Proper storage of cooking raw materials.*
6. *Proper use of equipment.*
7. *Creation of sustainable working conditions (protection of workers' physical and mental health) in the HoReCa sector.*
8. *Protection of ecology and biodiversity in the HoReCa sector.*
9. *Importance of reducing of the use of plastic consumables.*
10. *Importance of choosing traditional local cooking raw materials.*
11. *Importance of redesigning the distribution chain.*

*The complete ranking of all topics per country as well as the total for the whole survey is available in Annex III.*

### **Conclusions and Recommendations for Further Steps**

*As evident from the survey, the most common challenge for the “Green transition” of the sector is the lack of employees with relevant skills. So developing relevant guidelines and training materials for developing sustainability as a competence in the HORECA sector would be beneficial for both - representatives of the VET institutions and the business community.*

*The training programmes shall primarily focus on topics related to*

- *Waste management/reduction/elimination of waste*
- *Knowledge and understanding of the use of renewable energy sources*
- *Minimisation of waste of resources by developing skills for proper storage of cooking raw materials and proper use of equipment, etc.*
- *Sustainable working practices (including physical and mental health of the employees in the HORECA sector)*
- *Shortening the “farm-to-table” path by reducing or minimising transportation - use of local products, supporting local gastronomy with traditional meals and recipes, optimisation of the supply chain, switching to low-carbon economy*
- *Skills for identifying and selecting raw materials, produced in a sustainable way*



# Annexes

## Annex I Survey Topic Chart

### GreenComp

(a reference framework on sustainability competences at EU level)

GreenComp can support education and training systems in shaping systemic and critical thinkers who care about our planet's present and its future.

Personal level

- 1) Embodying sustainability values, including the competences:
- valuing sustainability
  - supporting fairness
  - promoting nature

Professional level

- 2) Embracing complexity in sustainability, including the competences
- systems thinking
  - critical thinking
  - problem framing

- 3) Envisioning sustainable futures, including the competences
- futures literacy
  - adaptability
  - exploratory thinking

Citizenship level

- 4) Acting for sustainability, including the competences:
- political agency
  - collective action
  - individual initiative

**Systems thinking** - To approach a sustainability problem from all sides; to consider time, space and context in order to understand how elements interact within and between systems  
 K: knows that every human action has environmental, social, cultural and economic impacts;  
 S: can describe sustainability as a holistic concept that includes environmental, economic social, and cultural issues;  
 A: is concerned about the short- and long-term impacts of personal actions on others and the planet.

**Critical thinking** - To assess information and arguments, identify assumptions, challenge the status quo, and reflect on how personal, social and cultural backgrounds influence thinking and conclusions  
 K: knows sustainability claims without robust evidence are often mere communication strategies, also known as greenwashing;  
 S: can analyse and assess arguments, ideas, actions and scenarios to determine whether they are in line with evidence and values in terms of sustainability;  
 A: trusts science even when lacking some of the knowledge required to fully understand scientific claims.

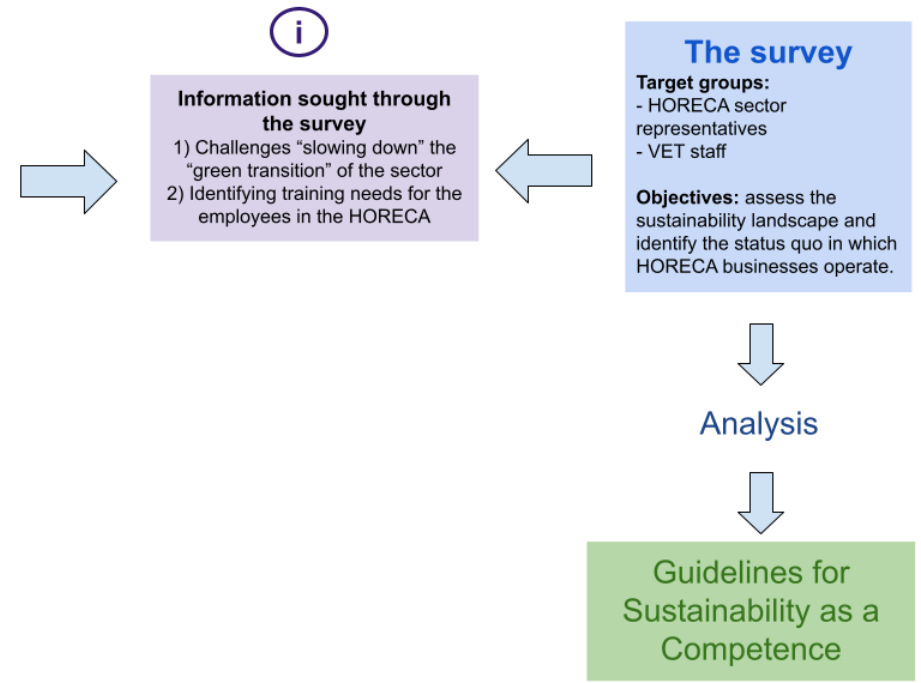
**Problem framing** - To formulate current or potential challenges as a sustainability problem in terms of difficulty, people involved, time and geographical scope, in order to identify suitable approaches to anticipating and preventing problems, and to mitigating and adapting to already existing problems  
 K: knows that to identify fair and inclusive actions, it is necessary to look at sustainability problems from different stakeholder perspectives;  
 S: can establish a transdisciplinary approach to framing current and potential sustainability challenges;  
 A: listens actively and shows empathy when collaborating with others to frame current and potential sustainability challenges.

**Futures literacy** - To envision alternative sustainable futures by imagining and developing alternative scenarios and identifying the steps needed to achieve a preferred sustainable future  
 K: knows the difference between expected, preferred and alternative futures for sustainability scenarios;  
 S: can envisage alternative futures for sustainability that are grounded in science, creativity and values for sustainability;  
 A: is aware that the projected consequences on self and community may influence preferences for certain scenarios above others.

**Adaptability** - To manage transitions and challenges in complex sustainability situations and make decisions related to the future in the face of uncertainty, ambiguity and risk  
 K: knows that human actions may have unpredictable, uncertain and complex consequences for the environment;  
 S: can take into account local circumstances when dealing with sustainability issues and opportunities;  
 A: is willing to discontinue unsustainable practices and try alternative solutions.

**Exploratory thinking** - To adopt a relational way of thinking by exploring and linking different disciplines, using creativity and experimentation with novel ideas or methods  
 K: knows that sustainability problems must be tackled by combining different disciplines, knowledge cultures and divergent views to initiate systemic change;  
 S: can synthesise sustainability-related information and data from different disciplines;  
 A: is committed to considering sustainability challenges and opportunities from different angles.

Source: GreenComp: The European sustainability competence framework, Luxembourg: Publications Office of the European Union, 2022.



## Annex II Questionnaire template (English)

Dear Madam / Dear Sir

Based on your experience and your high level of expertise in the HoReCa sector (Hotels, Restaurants, Catering), your participation in the Aim2Sustain action (by filling in the attached questionnaire), which takes place in the framework of the Erasmus+ program of the European Union, is considered particularly useful. Completing the questionnaire requires 10 to 15 minutes of your time.

The Aim2Sustain action aims to promote sustainability in the HoReCa sector by developing an innovative online learning space. Aim2Sustain is implemented by Verslo ir svetingumo profesinės karjeros centras (VESK), Lithuania, in collaboration with the University of the Aegean, (GR) Instituto do Turismo de Portugal (PT), ROC Mondriaan (NL), Kolez International (BG), Markeut Skills Sociedad Limitada (ES), and Danmar Computers Sp Zoo, (PL).

The questionnaire will be open until 30<sup>th</sup> April, 2023.

The person(s) responsible for the survey in (country) is/are:

(name, email, telephone, organisation).

Please complete the attached questionnaire. The collection and processing of the data as well as the publication of the results, will ensure your anonymity.

Thank you in advance for your contribution to the Aim2Sustain action.

Our research team remains at your disposal for any clarification.

Yours sincerely

(name, email, telephone, organisation).

<b>Please select according to your level of agreement.</b>						
<b>1. Strongly Disagree, 2. Disagree, 3. Neither Disagree/Neither Agree, 4. Agree, 5. Strongly Agree.</b>						
	<b>Variables</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>1.</b>	<b>Which are the challenges for implementing sustainable practices in the every-day activities in your organisation?</b>					
1.1	<i>It is very expensive, and we cannot afford it at the moment.</i>					
1.2	<i>We do not have idea how to do it.</i>					
1.3	<i>we have idea, but we do not have the methodology.</i>					
1.4	<i>we are lacking skilled employees, who could do this.</i>					
<b>2.</b>	<b>For sustainability to be preserved the human resources in the HoReCa sector need to be trained on the:</b>					
2.1	<i>Implementation of quality assurance systems (HACCP, ISO 22000, ISO 9000).</i>					
2.2	<i>Importance of choosing animal-origin cooking raw materials produced on a sustainable way.</i>					
2.3	<i>Importance of choosing organic cooking raw materials.</i>					
2.4	<i>Importance of choosing plant-based cooking materials produced on a sustainable way.</i>					
2.5	<i>Importance of choosing traditional local cooking raw materials.</i>					
2.6	<i>Design of workplaces e.g., the kitchen lay out.</i>					
2.7	<i>Practicing collaborative economy. e.g. Wolt (suggested by every partner)</i>					
2.8	<i>Implementation of zero waste programs.</i>					
2.9	<i>Preparation methods of cooking raw materials.</i>					
2.10	<i>Professional serving of drinks and food.</i>					
2.11	<i>Proper storage of cooking raw materials.</i>					
2.12	<i>Proper use of equipment.</i>					
2.13	<i>Proper use of the protective equipment.</i>					
2.14	<i>Importance of practicing sustainable logistics.</i>					
2.15	<i>Importance of reducing of the use of plastic consumables.</i>					
2.16	<i>Importance of respecting inclusion and diversity of human resources.</i>					

2.17	<i>Selection of sustainable suppliers of cooking materials.</i>					
2.18	<i>Strengthening of local gastronomy.</i>					
2.19	<i>Importance of using alternative/renewable energy sources.</i>					
2.20	<i>Importance of using environmentally friendly construction materials during the construction of the building facilities.</i>					
2.21	<i>Waste management.</i>					
2.22	<i>Waste recycling.</i>					
2.23	<i>Production and provision of safe services and products in the HoReCa sector.</i>					
2.24	<i>Creation of sustainable working conditions (protection of workers' physical and mental health) in the HoReCa sector.</i>					
2.25	<i>Resource protection and the transition to a low-carbon economy in the HoReCa sector.</i>					
2.26	<i>Protection of ecology and biodiversity by the HoReCa sector.</i>					
2.27	<i>Other: Please state... (delete as it is a separate quest.) done by Vesselina</i>					

<b><i>For statistical purposes, please add your background details in the following fields.</i></b>						
<b>Category</b>	<b>Sex</b>	<b>Age</b>	<b>Sector</b>	<b>Specialisation</b>	<b>Experience (in years)</b>	<b>Training</b>
<i>Front line employee</i>	<i>Man</i>	<i>18- 25</i>	<i>Hotels</i>	<i>Reception</i>	<i>1- 5</i>	<i>School diploma</i>
<i>Manager/ Owner</i>	<i>Woman</i>	<i>26- 30</i>	<i>Restaurant/ Cafes / Bars</i>	<i>Reservations</i>	<i>6- 10</i>	<i>VET School Diploma</i>
<i>VET center teaching staff</i>	<i>Other</i>	<i>31- 35</i>	<i>Catering</i>	<i>Waiting staff</i>	<i>11- 15</i>	<i>Degree</i>
<i>VET center administrative staff</i>	<i>I don't want to answer</i>	<i>36- 40</i>	<i>Other: Please state...</i>	<i>Cook</i>	<i>15 - 20</i>	<i>Post-graduate Degree</i>
<i>Other: Please state...</i>		<i>41- 45</i>		<i>Bartender</i>	<i>21- 25</i>	<i>Ph.D.</i>
		<i>46- 50</i>		<i>Barista</i>	<i>26 - 30</i>	
<i>Multiple answers</i>		<i>51- 55</i>		<i>Other: Please state...</i>	<i>31+</i>	
		<i>56- 60</i>				
		<i>61+</i>				

*I accept that the data I provide in this questionnaire will be statistically processed, and the results will be published. I understand that the statistical processing and publication of the results will protect my anonymity. (Tick box).*

*For more information about the survey, please contact: (name, email, telephone, organisation).*

## Annex III Survey results

Question 1: What are the challenges for implementing sustainable practices in the everyday activities in your organisation?

### Challenges for implementing sustainable practices in the every-day activity of the organisations



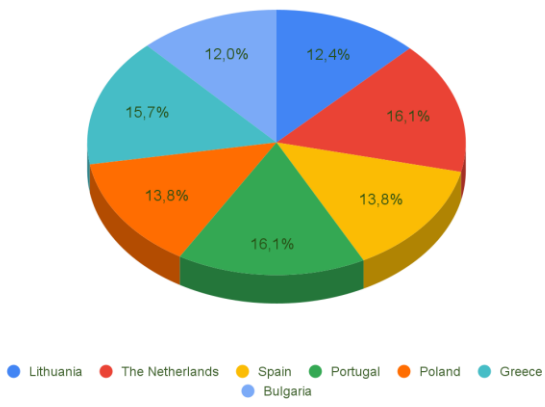
Question 2: Training needs

Training needs	Total	LT	PT	PL	GR	SP	NL	BC
Waste recycling.	4,66	4,70	4,74	4,57	4,59	4,67	4,59	5,00
Waste management.	4,65	4,67	4,69	4,60	4,56	4,67	4,56	5,00
Implementation of zero waste programs.	4,51	4,59	4,60	4,43	4,44	4,50	4,44	4,88
Importance of using alternative/renewable energy sources.	4,48	4,33	4,57	4,40	4,41	4,50	4,41	5,00
Proper storage of cooking raw materials.	4,46	4,56	4,40	4,50	4,35	4,33	4,35	4,77
Proper use of equipment.	4,42	4,52	4,29	4,40	4,53	4,47	4,53	4,38
Creation of sustainable working conditions (protection of workers' physical and mental health) in the HoReCa sector.	4,41	4,52	4,46	4,30	4,53	4,07	4,53	4,81
Protection of ecology and biodiversity in the HoReCa sector.	4,41	4,33	4,43	4,50	4,47	4,27	4,47	4,92
Importance of reducing of the use of plastic consumables.	4,40	4,56	4,60	4,47	4,26	4,00	4,26	4,96
Importance of choosing traditional local cooking raw materials.	4,39	4,33	4,43	4,43	4,29	4,33	4,29	4,73
Importance of redesigning the distribution	4,39	4,41	4,43	4,20	4,18	4,57	4,18	4,77

<i>chain.</i>								
<i>Strengthening of local gastronomy.</i>	4,37	4,41	4,60	4,30	4,44	4,13	4,44	4,77
<i>Importance of choosing animal-origin cooking raw materials produced on a sustainable way.</i>	4,35	4,30	4,34	4,50	4,18	4,40	4,18	4,88
<i>Resource protection and the transition to a low-carbon economy in the HoReCa sector.</i>	4,35	4,44	4,40	4,40	4,18	4,30	4,18	5,00
<i>Selection of suitable suppliers of cooking materials.</i>	4,35	4,59	4,34	4,20	4,00	4,40	4,00	4,88
<i>Preparation methods of cooking raw materials.</i>	4,33	4,41	4,31	4,37	4,12	4,20	4,12	4,54
<i>Importance of choosing plant-based cooking materials produced on a sustainable way.</i>	4,30	4,30	3,97	4,33	4,12	4,33	4,12	4,92
<i>Importance of choosing organic cooking raw materials.</i>	4,28	4,33	4,09	4,57	4,03	4,30	4,03	4,85
<i>Proper use of the protective equipment.</i>	4,27	4,44	4,20	4,33	4,21	4,17	4,21	4,38
<i>Production and provision of safe services and products in the HoReCa sector.</i>	4,27	4,41	4,23	4,27	4,29	4,13	4,29	4,85
<i>Importance of using environmentally friendly construction materials during the construction of the building facilities.</i>	4,25	4,22	4,20	4,23	4,15	4,13	4,15	4,96
<i>Importance of respecting diversity.</i>	4,22	4,44	4,31	4,27	4,24	4,12	4,24	4,27
<i>Professional serving of drinks and food.</i>	4,07	4,04	4,00	4,33	4,00	3,83	4,00	4,27
<i>Implementation of quality assurance systems (HACCP, ISO 22000, ISO 9000).</i>	4,06	4,19	3,74	4,53	4,21	4,13	4,21	4,00
<i>Design of workplaces e.g., the kitchen layout.</i>	3,94	4,04	4,03	4,20	3,91	4,13	3,91	4,04
<i>Implementation of the sharing/collaborative economy.</i>	3,76	4,04	3,51	4,27	3,41	4,23	3,41	3,96

Profiles of the respondents:

Respondents per countries distribution



Affiliation/Category

